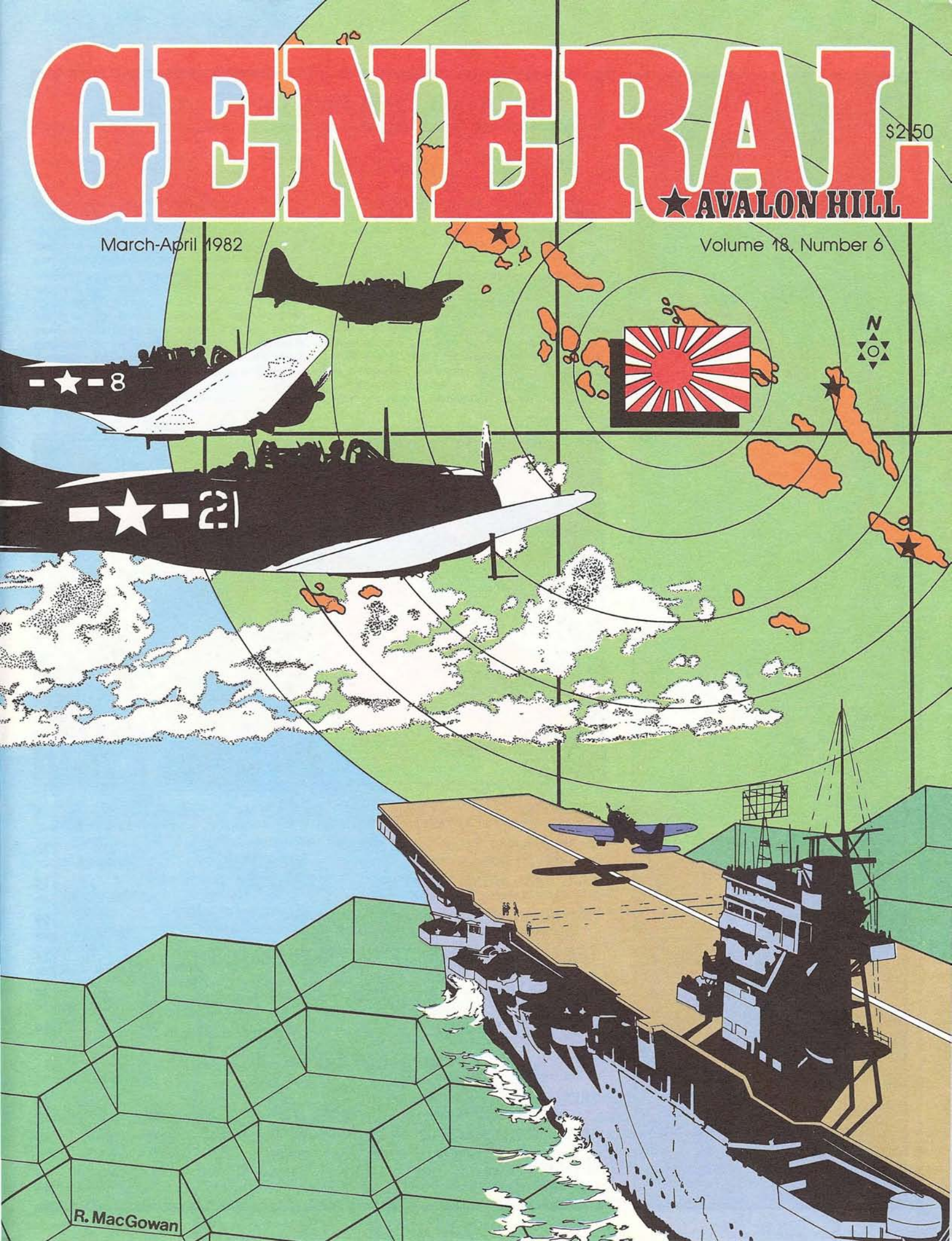
GENERAL

$2.50

★AVALON HILL

March-April 1982

Volume 18, Number 6



The AVALON HILL GENERAL

The Game Players Magazine

The Avalon Hill GENERAL is dedicated to the presentation of authoritative articles on the strategy, tactics, and variation of Avalon Hill wargames. Historical articles are included only insomuch as they provide useful background information on current Avalon Hill titles. The GENERAL is published by the Avalon Hill Game Company solely for the cultural edification of the serious game aficionado, in the hopes of improving the game owner's proficiency of play and providing services not otherwise available to the Avalon Hill game buff. Avalon Hill is a division of Monarch Avalon Industries, Inc., a wholly owned subsidiary of Monarch Avalon, Inc. The shares of Monarch Avalon, Inc. are publicly traded on the NASDAQ System under the symbol MAHI. For information about the company write to Harold Cohen at the executive offices of the company, 4517 Harford Rd., Baltimore, MD 21214.

Publication is bi-monthly with mailings made close to the end of February, April, June, August, October and December. All editorial and general mail should be sent to the Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214. One year subscriptions are $9.00. Two year subscriptions are $14.00. All domestic subscriptions sent via bulk permit. Domestic First Class Delivery and all subscriptions to Canada and Mexico must pay an additional $9.00 per year postage charge. All overseas subscriptions must add an additional $12.00 per year postage charge. Send checks or money orders only. AH is not responsible for cash lost in transit. Those with a current American Express, VISA, MasterCard or Choice may call 800-638-9292 toll free to renew subscriptions or order merchandise. Absolutely no complaints or questions will be handled on this number. Any business other than a credit card purchase must be handled by mail. Address changes must be submitted at least 6 weeks in advance to guarantee delivery. Paid advertising is not accepted, but news of importance to the gaming community is solicited. Convention announcements must be received at least 3 months in advance and contain information pertaining to AH games in use.

Articles from subscribers are considered for publication at the discretion of our editorial staff. Articles should be typewritten, double-spaced, and embrace the tenets of good English usage. There is no limit to word length. Accompanying examples and diagrams should be neatly done in black or red ink. Photographs should have caption and credit line written on back. Rejected articles will be returned whenever possible.

EXECUTIVE EDITOR: Donald J. Greenwood
MANAGING EDITOR: Rex A. Martin
GRAPHICS: Jean Baer, Dale Sheaffer, Charles Kibler, Rodger MacGowan, Stephanie Czech
Cover Art: Rodger MacGowan
Masthead Design: Stephanie Czech
AREA Technician: Diana Widener
GENERAL Subscriptions: Gertrude Zombro
Purchases of Games, PBM kits and parts: Christy Shaw
FOREIGN DISTRIBUTORS: Overseas readers are urged to make subscription arrangements with the appropriate agent, AUSTRALIA: Jedko Games, 18 Fonceca St., Mordialloc, 3195, Victoria; DENMARK: Jorn Eriksen, Sondertoften 209, DK 2630 Taastrup; GREAT BRITAIN: Avalon Hill (UK) LTD, 650 High Rd., North Finchley, London N. 12, ONL; JAPAN: Post Hobby, 1-38 Yoyogi, Shibura-KU, Tokyo; SINGAPORE: Wong International Entr., 6 Jalan Sinar Bulan; Singapore 1750; SOUTH AFRICA: Gamma Games Ltd, P.O. Box 2904, Capetown 8000; SWEDEN: Target Games, Skogvaktargatan 2, S—11542 Stockholm.
Rules Questions: R&D, NOTE: all questions should be diagrammed. No questions can be answered which are unaccompanied by a self-addressed envelope. Questions must be based on rules of play (not historical or design matters) and be based on the current rules edition. Questions on more than one game must be listed on separate pages and accompanied by a separate SASE for each game.
IF YOU CHANGE YOUR ADDRESS: Inform us immediately. The Post Office destroys magazines even if you leave a forwarding address. AH ASSUMES NO RESPONSIBILITY FOR ISSUES LOST DUE TO AN INVALID ADDRESS. Please state both your new and old address.

Copyright 1982

The AVALON HILL Game Company

4517 Harford Road,
Baltimore, Md. 21214

Avalon Hill Philosphy Part 90

Has it really been ten years? As I ponder bringing this column to life for the 60th time it seems hard to believe, but calendars don't lie. Vol. 9, No. 1 was my maiden voyage as editor of *THE GENERAL*, and now a scant ten years later I must relinquish the helm to another as time marches on. For this, dear reader, is my last issue as your trusty (or is that crusty) old editor.

Yes, I've finally been kicked upstairs into the Valhalla of fulltime game design/development. Impatient *SL* addicts wondering where their next gamette fix was coming from stand out as the most compelling reason. Hopefully, this move will allow me to deliver the long promised *G.I.* game at ORIGINS '82. Then too, ten years is probably too long to inflict the opinions and personality of one old grognard on any readership. You've suffered long enough at my hands. The opportunity for your magazine to take on fresh ideas under new leadership is long overdue. While I am genuinely proud of the format we have developed for *THE GENERAL* during the past decade, perhaps greater things can be accomplished from the vantage point of a fresh perspective. I have been advised from time to time that mine is a rather opinionated and dry style much too grating on the nerves of those with dissimilar tastes. Then, again, all too often in recent days, I have allowed the hypocrisy and politics in our hobby to draw me out of the comfortable shadows of apathy and onto the soapbox that the editorship of this magazine inadvertantly provides. Perhaps it is time for a steadier hand at the till.

Continued on Page 42, Column 3

ON DECK — 5
The Revision of FLAT TOP — By Alan R. Moon

DESIGN ANALYSIS — 13
FLAT TOP Errata — By Alan R. Moon

FLAT TOP, MORE OPTIONS — 15
Optional Rules for FLAT TOP — By Don Gilman

BRITISH FLAT TOPS IN THE SOLOMONS — 19
Introducing British Carriers into FLAT TOP — By Bob Collman

THE BRITISH FLEET IN VICTORY IN THE PACIFIC — 21
Expanding The British Role in VITP — By Jim Davis and R. Hamblen

PRE-EMPTION — 24
Naval Aviation Tactics in MIDWAY — By Capt. R. Harmon

BLITZ JAPANESE — 29
How to Pronounce Oi, Ise, Hiei, et al. — By Chris Roehl and Grace Beard

NATIVE POLICY IN SOURCE OF THE NILE — 31
Analysing the Probabilities in SOTN — By Michael Anchors

FLEET BOAT — 34
American Pacific Operations for SUBMARINE — By Richard Strangman

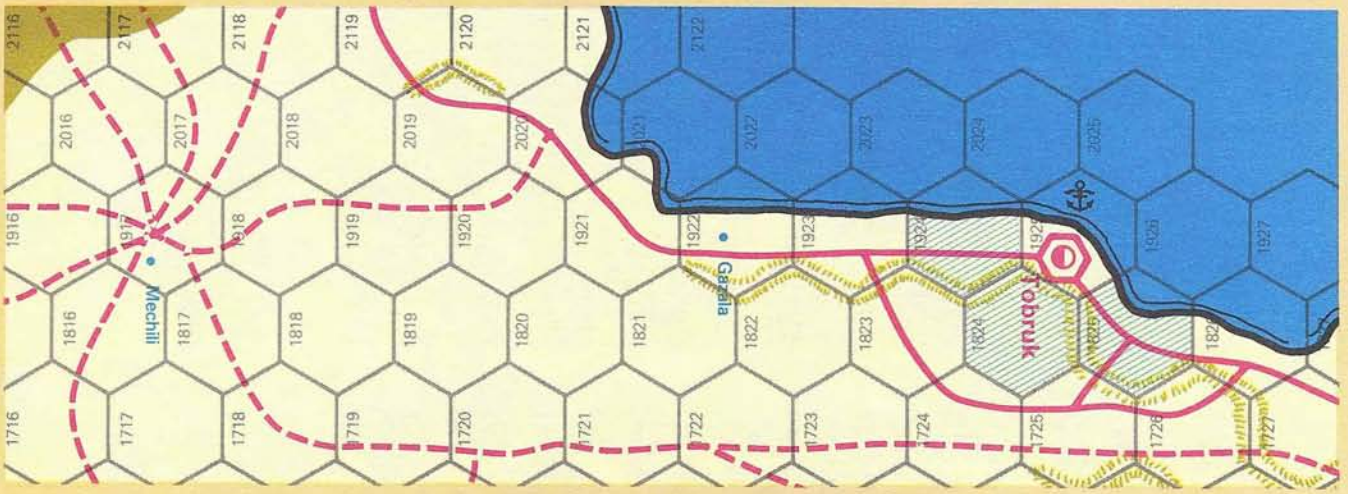
BLITZ IN THE PACIFIC — 36
Or Victory in the Krieg — By Jim Stahler

IT IS WRITTEN — 43
Submissions to the GENERAL — By Robert Harmon

2/10 3-60

PANZERARMEE AFRIKA

41US X 3-50



ROMMEL IN THE DESERT, April 1941-November 1942

- Highly fluid campaign
- Realistic logistical considerations
- Unusual combat resolution

Erwin Rommel and the first small contingents of what was to become **"PanzerArmee Afrika,"** arrived in North Africa in the early Spring of 1941. Although prudence (and his orders) dictated otherwise, Rommel went on the offensive against the scattered Allied army. In less than two weeks he was besieging the fortress of Tobruk, and pressing on to Egypt.

PanzerArmee Afrika re-creates the sweeping action of the desert war—a curious land campaign having many of the aspects of a naval battle: far-flung actions by relatively small formations, extremely fluid fronts, and long-distance supply problems.

The high Movement Allowances of the units combined with the critical supply problems, make for a game of constant surprise and tension (there is rarely a line that can't be flanked or penetrated). Combat resolution relies on "attack superiority" (in terms of Strength Points) rather than the more usual odds comparison. Weak units can be easily overrun and this coupled with the German ability to deliberately move out-of-supply presents a constant challenge to the Allied Player.

PanzerArmee Afrika is fast becoming one of the most popular games largely because of its extreme "playability" without sacrificing authenticity.

PanzerArmee Afrika is a simulation of the North African Campaign between April 1941 and November 1942. Battalion, Regiment, and Brigade-sized units represent the actual forces which took part in the fighting. Included in the game is a Variable Orders-of-Battle Chart that offers variations in forces to demonstrate how history might have been different.

PanzerArmee Afrika is basically a two-player game. It is played in sequenced turns called Game-Turns, during which Players move units on the map, have combat, and attempt to achieve certain objectives. Victory is based upon comparative strength levels at the end of the game and the capture of Enemy bases.

Each complete Game-Turn represents one month of real time. The entire game lasts 20 Game-Turns.

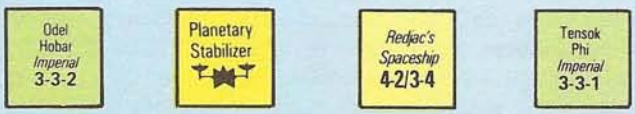
Each hex on the map represents 12 miles of land. Each Battalion-sized unit represents 600-1000 men. Each Brigade-sized unit represents 2000-4000 men. Each Regiment-sized unit represents 1100-3200 men.

PanzerArmee Afrika is basically a 2-player game for ages 12 & up. **Rated 4** on the Avalon Hill Complexity Scale (1-easy, 10-hard).

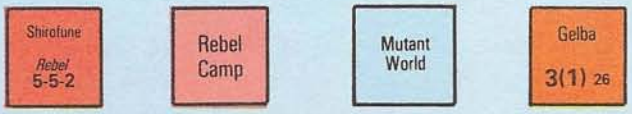
PANZERARMEE AFRIKA is available now for $16.00 from the Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214. Please add 10% for postage and handling (20% for Canadian orders, 30% for overseas). Maryland residents please add 5% state sales tax.

FREEDOM IN THE GALAXY

In a remote corner of the universe, a small but valiant band of Rebels struggle to withstand the oppression of an empire bent on total domination.



The Empire, oppressor of billions throughout the galaxy, has felt the first sting of Rebel anger. In the cities and vast wilds of planets circling the farthest stars, the sparks of insurrection are being fanned by the courageous few who cry for freedom in the galaxy.



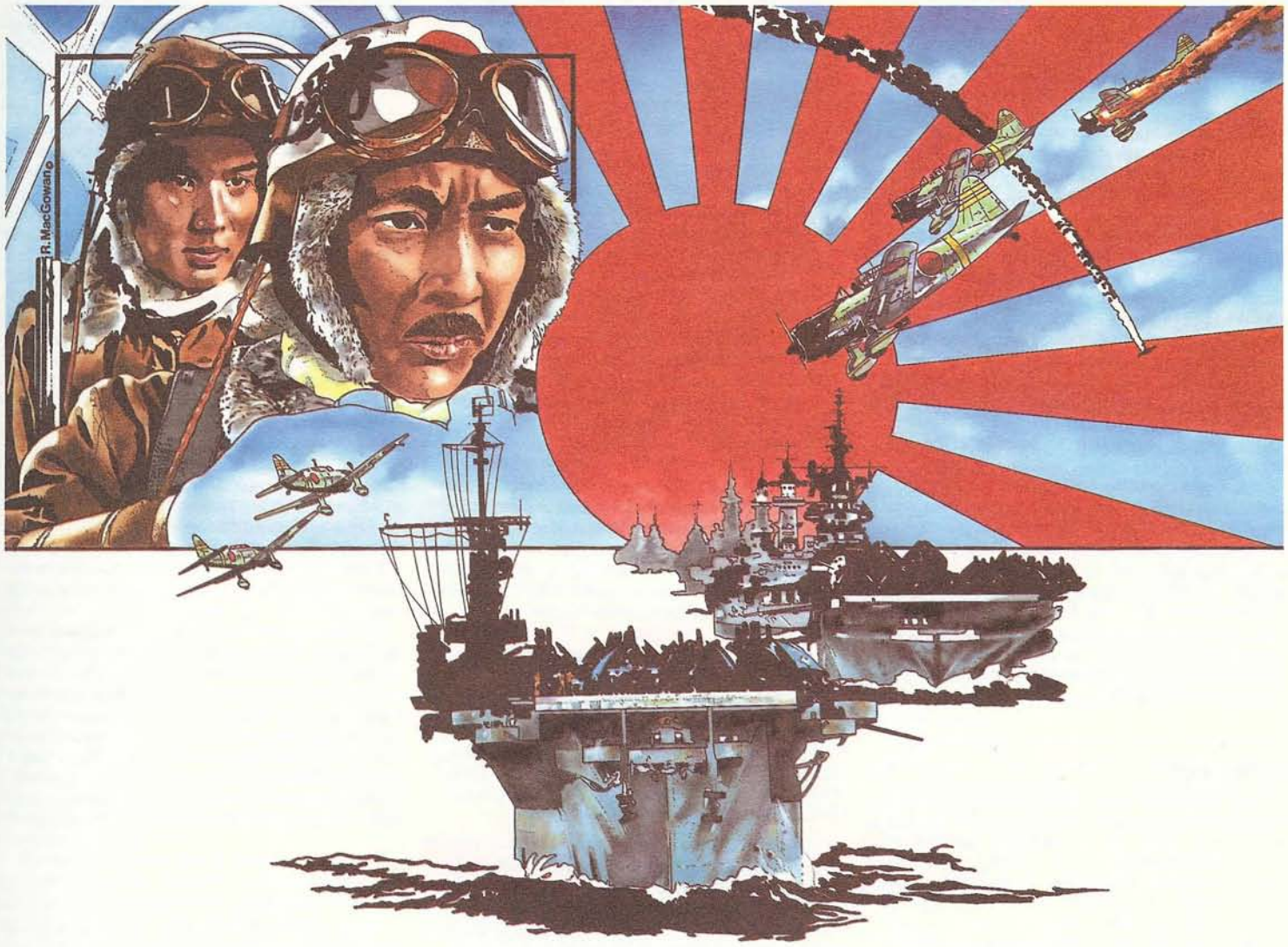
Freedom in the Galaxy is a strategic and tactical simulation of this epic galactic struggle, played on a map that schematically represents some 30 odd solar systems. The playing pieces (shown here), representing armed forces, spaceships, Imperial characters and individual Rebels, interact to destroy their enemies and win the hearts and minds of various races and planets.

Now YOU can join this group of freedom fighters in **Freedom in the Galaxy,** a 2-player game that includes:

- **140 Character Cards**—many beautifully illustrated—representing many alien races
- **400 playing pieces** and handsome full-color **map** showing natural and political details of 51 planets and 25 star systems
- **Rules Booklets** with numerous illustrations describing all three complete game systems
- **Galactic Guide** with novel-like information on the inhabitants of the galaxy and their history
- Various and sundry **Playing Aids** making it easy for you to play the most thrilling science-fiction adventure you've ever had—in this or any *other* galaxy.

- **STAR SYSTEM GAME,** introducing basic concepts of combat, characters, and missions—**Rated 4** on a scale of 1 (easy) to 10 (hard) on the Avalon Hill Complexity Scale.
- **PROVINCE GAME,** an intermediate level game increasing variables in play—**Rated 7!**
- **GALACTIC GAME,** the ultimate in S-F realism—**Rated 10!** PLUS a variety of scenarios within each game system

Freedom in the Galaxy is available now for $20.00 from the Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214. Please add 10% for postage and handling (20% for Canadian orders, 30% for overseas). Maryland residents please add 5% state sales tax.



ON DECK

THE REVISION OF FLAT TOP

By Alan R. Moon

The first time I saw *FLAT TOP* was at a meeting of the Jersey Wargamers Association. One of my friends, Dennis, had just traded his unpunched copy to another of my friends, Bob. I went over and peeked in the box. The map was a little bigger than I had expected. The rules were a little longer. I decided I'd never play the game. Then I looked at the counters. When I saw the individual bomb units, I was convinced the game was way out of my complexity preference. Bob had come over by now and was trying to convince me what a great game it was. I chuckled. He said we should play it next time we got together. What a comedian.

Through the next several weeks, Bob persistently expressed his desire to play *FLAT TOP*. I began to remember all the times he had played games I had wanted to play. I began to feel guilty. I decided it was time to grit my teeth and bear it. I took the rulebook home to read it over before our next gaming session.

Anyone who has played *FLAT TOP* will know how our first game went. After five hours, we had played less than 20 turns. I had a tremendous headache, my vision was blurred, and my whole head felt kind of fuzzy (not my normal condition despite what you may think). Quite a few of my planes had crashed into the sea, unable to make it back to a carrier or base because of a lack of fuel. We had not even sighted each other's ships! Despite this, I had thoroughly enjoyed myself.

The next three or four games were a continual learning process. I would reread the rulebook after each game and find several more things we had done wrong. It wasn't until about the fifth game that we had learned the movement factors and range factors for most of the planes and were getting into the subtleties of the system. Completely addicted, we began playing *FLAT TOP* three or four nights a week.

Four months later, overdosed, we finally came up for air. Since that time, I have played the game less than a dozen times. But those four months will probably remain the most intense, enjoyable time of my gaming life.

It was an incredible coincidence that shortly after I came to Baltimore, AH bought BATTLELINE. *FLAT TOP* was suddenly in my hands. Lucky me.

As it turned out, the project became as much of a bear as the first few playings of the game had been. Usually decisive, I had trouble making up my mind about many of the changes I wanted to make. I became like a pitcher on deck; hoping he has a chance to hit, dreading the possible failure, and trying to keep his mind on his real job. There I was; wanting to change parts of *FLAT TOP*, knowing I was messing with a good thing, dreading the possibility it wouldn't turn out better

or even as well, and trying to keep my mind on my other projects since *FLAT TOP* was supposed to get just a superficial revision. The results are not in yet, but the count is three and two; the pitcher winds up and comes to the plate . . .

Perhaps the biggest change I decided to make was to the rulebook format. Despising the informality of the BATTLELINE rules, I went to the much more formal, numbered AH organization.

The original rulebook was divided into a basic game, an advanced game, and an optional rules section. I decided the game was too complex to necessitate a basic game. Anyone who was going to take the time to play *FLAT TOP* in the first place was going to start with the advanced game and disregard the basic game. *FLAT TOP* is not a game for beginners and I knew I could take aim at the hardcore gamer and forget about trying to present rules for the novice. The "10" Complexity Rating would be enough to scare off the less hardy.

So, I combined the basic game, the advanced game, and some of the optional rules into one game, thus presenting new players with the version of the game that included most of the rules experienced players used. I retained an optional rules section, including some of the original optional rules and some new ones, but tried to downplay it with a introductory warning. While the rulebook has increased in number of pages from 34 to 36, the actual number of pages devoted to rules has decreased significantly.

The Mapboard

One of my early fears concerning the game was that the mapboard would be too big to fit into the standard AH flatbox size. I was most delighted to find out that not only was it not too big, it was too small. I could add two hexrows to the width of the board and encircle the whole grid with a border.

Two hexrows were added to the left map section. In the BATTLELINE version of the map, Port Moresby is in the westernmost hexrow. In the AH version, there are two hexrows to the west of it, enabling some additional maneuvering for Air Formations and TFs in this area, especially in the Coral Sea scenario.

One of the ugliest things about many maps are the rows of half-hexes at the edges. A border is much more attractive and solves any problems dealing with which hexes are playable and which aren't.

I have never understood why the Japanese base on New Ireland, Kavieng, was not in the game. It seemed a logical inclusion since it was only just off board. I added it.

Many times accident has been the inventor's best friend. While Dale Sheaffer and I were putting the map together, Dale accidentally blacked in the outline of Long Island (not the one in NY). I liked the look and decided to make all the non-essential islands solid black. It is now clear which islands have coastwatchers and which don't, since islands that don't are solid black. I expected to get some questions asking what the difference between the two types of islands was. I have yet to get one. I just hope nobody is treating them as if they weren't there and moving TFs through them.

Instead of differentiating between Allied coastwatchers and Japanese troops, I labelled them both coastwatchers in the game and used black and white stars to differentiate them on the map. I added coastwatcher symbols on every island that had a friendly base. I also added a Japanese coastwatcher perimeter line on New Guinea since it was ridiculous to allow the Japanese player to observe Allied ships on the south coast of the island.

The Australia and Truk entry hexes were reduced to two and one respectively, simply because there did not seem any reason to have more than this. Japanese Air Formations from Truk are normally required to land at Rabaul after entering the map because of fuel requirements. Likewise, Allied Air Formations normally fly from Australia to Port Moresby.

The Turn Record Chart was removed from the mapboard to add a little more space to the southern part of the map, again helpful mainly in the Coral Sea scenario. The Victory Points Chart was retained on the map since it is so important that it be accessible to both players.

There were numerous changes to the coastlines of many of the land masses, all of which were done to remove ambiguities as to whether a hexside was partial-sea or all-land.

The Counters

Eight hundred counters is a lot of counters for a game. Still, I felt it wasn't enough. I expanded the counter mix to thirteen hundred! Added were more change counters for almost every plane name, 10 Air Factor counters for those plane names that appear in quantity in the scenarios (like Zero and B-26), more hit markers, more weapon markers, etc.

Three additional plane names (Buffalo, Vindicator, and B-24) and numerous ships (like Japanese CVs *Akagi* and *Kaga*, and all the American battleships at Pearl Harbor) were added to allow players to recreate almost any historical or hypothetical scenario in the years 1941 and 1942. Some of these additional counters are used in the Midway scenario that follows this article.

The specifications of some planes were changed. The RF of the B-17 was upgraded from 10 to 12. The RF of the P39 and P40 was upgraded from 3 to 5. My playtesters suggested many more changes to plane specifications and backed these suggestions with all sorts of research. I resisted, feeling there was no reason to change the current specifications if they worked, and most do. The B-17 RF was changed to allow it to be more valuable as a search plane and because it was the most underrated of all. The P39 and P40 RFs were changed to allow them to have some value as interceptors. With an original RF of 3, these planes were useless. They had to take off on the turn the bombers arrived, attacking them that turn, and since they would use one RF during air-to-air combat, they would have to land on the next turn. The RFs of Pete and Dave floatplanes were also upgraded since with an RF of 4 players tended to just leave them on ship, it being too much trouble to spend time taking them off and landing them three turns later; their effective range for searching being eight hexes from the ship.

The only changes to the Air Hit Tables were to eliminate the capability of the Japanese floatplanes to perform as bombers. The BHT of 1 against bases, while historical, is ridiculous in game terms. Players only use the floatplanes as search aircraft or, in desperation, as interceptors.

A change that was not made lightly was to remove the plane types (such as *fighter* and *torpedo bomber*) from the counters and rules. I figured players who are interested in carrier warfare know what type each plane is and players who don't, won't care. In the original game, planes were classified by type, by handling capability (*seaplane*, *carrier plane*, etc.), and by function (*interceptor*, *bomber*, etc.). In the belief that two classifications are simpler to remember than three, I eliminated the plane types and distinguished planes simply by handling capability and function.

The Charts

The two Operations Charts were themselves each divided into two charts. The overall size remained the same, but I think the new charts are easier to use and arrange around the mapboard.

The number of Task Force boxes was increased from twelve to fourteen. However, five of the fourteen are strictly for TFs that do not contain plane carrying ships. The most CVs/CVLs that appear in one scenario for one side is four, so nine plane carrying TF boxes should be more than enough.

The number of Air Formation boxes was reduced from 36 to 35, just because this number fit on the chart better. Each box is divided into a high and low altitude, eliminating the need for "low" counters.

The base boxes were arranged and sized proportional to their use in the game. In Flight boxes were added to each TF and base box for Air Formations that use a maximum take off and for CAP.

The Games Tables Card was separated into two cards. One (two included in the game, one for each player) contains the charts that the players will most often need to refer to: the Air Hit Tables, the CRT, and the Observation Tables. The other contains all the minor tables and the Turn Record Chart, whose presence required the card have information on one side only. Some players may wish to cut out the Turn Record and place it at the side of the board for easy reference.

The most significant change in components is the log sheet. In the original game, the hex numbers on the log sheet were barely readable. For those of us with less than perfect vision, this made searching a real headache. To rectify this, I substituted two log sheets for one; together these make up a 45% reduction of the mapboard, which created bigger hexes for TF movement and readable hex numbers. While the two log sheets are somewhat physically cumbersome, playability is definitely improved.

Hidden Movement

In the BATTLELINE game, only TFs could use hidden movement. The change that has had the most impact on the game is the extension of the hidden movement system to include Air Formations. Both TFs and Air Formations can now move on the log sheet.

There were two major reasons for this change. One, it reduces the length of the Plane Movement Phase by reducing the time players spend searching, because fewer Air Formations move on the mapboard and only Air Formations on the mapboard can search. Except for observed Air Formations, a player will only leave Air Formations containing search planes on the mapboard. Since time is not spent moving every Air Formation on the mapboard, the number of times the opponent must follow along and check to see if any of his units can be observed is cut at least in half.

The second reason deals with strikes. With hidden Air Formation movement, a strike can be launched and flown to its target without alerting the other player. This adds a tremendous amount of tension and realism to the game. Before, when a TF with a carrier was sighted, the player would see enemy Air Formations appear on the mapboard and head his way, and he would know it was a strike. Now, he is never sure if, or when, a strike is coming because the strike will move on the log sheet until it reaches its target, unless sighted.

Searching & Shadowing

As I have already alluded, one of the few things I didn't like about the original game was the observation system. Not only was it long and drawn out, it was much too certain and fairly complicated.

Five condition numbers seemed unnecessary so I reduced the number to three. Condition number five where exact ship and plane names were revealed was eliminated. Observation was never that exact. Even after combat, pilots sometimes didn't know what ships they had attacked. In one infamous blunder, a few Japanese planes actually tried to land on a US carrier. Condition numbers three and four were combined into one condition number which is the highest condition number in the present game: condition three. Condition numbers one and two remained basically the same.

The format of the Observation Tables was changed to allow quick reference. Unfortunately, I blundered by repeating a mistake that existed in the original game. Coastwatchers are unlike other observing units and need additional explanation. In the errata (elsewhere in this issue), coastwatchers are deleted from the chart and handled in a revised version of rule 7.9.

Altitude differences were also deleted from the Observation Tables because their impact seemed negligible in game terms.

Weather, an optional rule in the original game, was included in the game because it does have a significant impact on play, especially the searching and shadowing procedure. Moving into clouds or a storm is often the only way a TF can escape observation, especially after it has been sighted. Weather can also cause some problems for Air Formations during landings and take offs and mandates players to make contingency plans when weather may be a factor. Finally, requiring carriers to move into the wind during turns when planes take off is the kind of rule that shouldn't be optional in a game as complex and realistic as *FLAT TOP*.

Cloud movement was reduced from every turn to every even numbered turn since clouds moving at 40 mph seemed a little out of hand. I also wanted to lessen the aggravation of having to move thirty-two cloud markers every turn.

Air Formations are now forbidden from entering storm hexes and, if an Air Formation begins a turn in a newly created storm hex, it must leave by the most expedient route before moving in any other direction. TFs may not move if they begin a turn in a storm hex and must end movement if they move into one.

The black arrow that establishes the inital wind direction in Sector IV was shifted 60 degrees counterclockwise to establish a more even cloud flow on the eastern half of the mapboard.

Finally, clouds modify Search Table and Shadowing Table die rolls.

Which brings us to the other major change in the game: the Search Table. I have already stated that observation was too certain in the original game. For instance, with four Air Formations, each containing one Catalina Air Factor (representing three planes), a player could search an area consisting of 200 hexes or approximately 60,000 square miles. That's a lot of sea. My eyes get blurry just thinking about it.

The Search Table adds an intangible to observation. In justification, an unsuccessful roll on the Search Table can be explained in many ways including one or more of the following: 1) the crew simply missed something, 2) the crew was doing other things when they should have been looking, 3) the plane had one or more minor malfunctions that reduced its searching ability that turn, 4) the plane passed just out of range of a TF in a nearby hex, and 5) two or more of the planes represented by the Air Factor covered the same section of the search area and missed some other section.

Some players may not agree with my reasoning and may still not like the Search Table. Indeed, I wouldn't be surprised if some don't use it. But I feel it was needed because it gives TFs some chance (and hope) of getting away. In addition, it gives shadowing some purpose.

In the original game shadowing was automatic. This was unreasonable. Once sighted, a TF was in deep trouble because it was automatically under observation from then on till nighttime or a storm came along. One of my first changes to the game was to add a Shadowing Table. Unfortunately, several playtesters found a way around this almost immediately. Instead of shadowing TFs, players decided it was easier just to reestablish contact each turn by the regular observation procedure. Why take a chance by rolling on the Shadowing Table? It became obvious that I would have to either reinstate automatic shadowing or reduce the certainty of regular observation. I opted for the latter.

Now, neither searching nor shadowing are absolute quantities. An Air Formation that is searching has a one-third chance of failure. On a roll of '1-4', the Air Formation can search. On a roll of '5-6', the Air Formation cannot search, though it can move normally (it must remain on the mapboard). An Air Formation that is shadowing has a one-sixth chance of failure, being unsuccessful only on a roll of '6'. However, if it is unsuccessful it cannot move or search that turn.

The result is that nothing is certain anymore. TFs now have a chance of not being observed when enemy Air Formations are near and have a chance (though less) of escaping observation even after being sighted. To my way of thinking, this is an improvement. Finally, players will use shadowing as it was intended to be used and not try to get around the rules.

One other minor change here was to add the restriction that only one Air Formation can attempt to shadow each TF, even if that one is unsuccessful. It is unlikely that an Air Formation would backup another in this capacity.

Interception

Interception was another mechanic in the original game that was a sure thing. Since I was making everything else less than certain, naturally the interception procedure was revised.

In the original game, only the player with the initiative could intercept enemy Air Formations during movement. Again, basing a game mechanism on which player had the initiative seemed illogical. Now both players may attempt to intercept enemy Air Formations in any eligible hex by consulting the Interception Table. The table is setup so that interception is based on the number of Air Factors in the hex. The more total Air Factors (combining the number of Air Factors of both sides), the more chance interception will take place. This system seems logical and adds more strategy to the game, especially concerning the use of CAP.

Air-to-Air Combat

One of the first real rule problems emerged during a game in which both sides had TFs (that contained plane-carrying ships) and Air Formations in the same hex in the same turn. The rulebook just didn't cover anything like this. The situation was compounded by the fact that some planes in Air Formations of both sides were at high altitude and some were at low. In addition, both sides had interceptors present.

Rules 14.17 and 14.18 clarify the options players have in this type of situation. Players can now interchange escorts and interceptors in the same hex. Since this situation should only occur in hexes containing bases of TFs, it seems logical to allow this considering the reorganization rules. When both players have escorts and interceptors, they must now simultaneously and secretly allocate these planes to one function or the other.

Surface Combat

One of the most irritating problems with the game concerned bombardment. Ships could just station themselves in a hex with a base and bombard the base each turn. This was especially effective at night. It reminded me of an old western where nobody ever had to reload their gun. An inexhaustible supply of shells was also a problem in ship-to-ship combat as well as players never hesitated to engage the enemy.

To rectify this, all ships were given an ammunition factor. Each time a ship participates in surface combat or bombardment, it uses ammunition factors. While it appears that the ammunition factors are extremely low, this is somewhat deceptive. There is only one round of surface combat each turn and this is assumed to cover a whole hour of combat. That's a lot of shells. In addition, this also keeps players from using unusual tactics that have little to do with the carrier tactics the game is trying to recreate. Tactics such as the Japanese player sending ships to Espiritu Santo to knock out the base with bombardment to collect victory points are minimized.

Most of the other changes concerning surface combat were very minor. The BHT required for torpedo attacks during night turns was changed from eight to seven to allow the Japanese player, who most often uses torpedo attacks, a slight historical advantage.

Light cruisers and destroyers were given torpedo factors of 2 and 1 respectively. A recommended optional rule that I probably should have put in the basic game allows Japanese DDs one torpedo reload.

Only BBs and CAs can fire at BBs, unlike in the original game where a bunch of smaller ships (like a TF of 10DD) could gang up on a BB. Now BBs are ships to be feared in surface combat, which again necessitates that players emphasize carrier tactics rather than surface combat.

Initiative

As detailed in previous paragraphs, several rules associated with the inititative have been changed. No longer is initiative the determining factor in the ability of Air Formations to go to high altitude on the turn of take off or in interception attempts.

So what is the advantage of having the initiative? Well . . . There really is no advantage. The question should really be is this an improvement or a detraction?

Since initiative is decided by a die roll, it is not controlled by the players (even lucky ones like me). In keeping with the basic focus of *FLAT TOP* as a game of skill, having the initiative established by luck indicates it is not a terribly important concept in the game. The initiative system in *FLAT TOP* is little more than a way of establishing which player moves first during the Plane Movement Phase. It should not be construed as anything else. I have tried to eliminate all instances in the rules where a mechanic revolved around which player has the initiative.

Unfortunately, players may say that the player without the initiative (the player who moves second in the Plane Movement Phase) now has some slight advantage. This is true, since he can react to moves (primarily strikes) made against him. However, since players must form Air Formations during a previous step, anticipation and planning are really the demanding elements.

It should be noted here that many players wanted to add a scrambling system to the game, where planes on a carrier or at a base could take off when a strike moved into their hex. By my way of thinking, this goes against the nature of the game. *FLAT TOP* demands that players plan ahead. They

should not be given a second chance. It's like jumping out of a plane and suddenly remembering you forgot your parachute. Geronimo! (Nobody gave the people at Pearl Harbor a second chance.)

Luck

Despite the previous remarks on luck dealing with initiative, I thought combat definitely needed more luck. The CRT made the results too predictable. There was no chance of one plane sinking a ship or of a large strike failing to score a hit, though both of these occurrences happened during the war. The original rulebook contained an optional rule on luck which offered one system for maximum luck and one system for minimum luck. I decided to swap these systems and put the maximum luck system in the basic rules and include the original luck and minimum luck systems as an optional rule. I also thought about including the critical hit optional rule in the basic game, but decided to leave it as an optional rule.

A lot of players will no doubt disagree with this decision. I have made no secret of the fact that I feel lucky when I play games. But as a Vietnam veteran, I also know that when the bullets are flying, you damn well better believe in luck. Every pilot I met in the Air Force was optimistic as hell. They had to be. Game players should have that same attitude. One of the problems with many wargames is that the commander is more in control of the situation than any commander in real life could ever possibly be. While a good leader can mean the difference (as can a good player), Lady Luck is often the most unpredictable and decisive obstacle in the path of victory. *FLAT TOP* needed to be a little more unpredictable.

Take the following example. The Allied player has 16 Dauntless attacking a TF with 8AP and 2CA. Dive bombing, the BHT would be 7. Does he go for all of the APs, allocating one Dauntless against four of them (a result number of 0 requiring he roll '5-6' to hit), and three Dauntless against four of them (a result number of 1 requiring a roll of '3-6' to hit)? Or, does he go with better odds like four Dauntless against four APs (remember, the 2CA get anti-aircraft fire). I like to make these choices and I really like to see other players make them.

Introductory Scenario

While I didn't think *FLAT TOP* needed a basic game, I did think a basic scenario might help novice players get into the system. "Rings Around Rabaul" is meant to be used only by players who have not played the original game and should be ignored by experienced players. I thought about putting in another introductory, hypothetical scenario but then decided to let players fend for themselves.

Victory Points

It is not easy to knock out a base in *FLAT TOP*, which is okay because it wasn't easy to do it during the war either. However, if a player does ambitiously follow this strategy, he deserves more of a reward. So, the reason for the additional points for knocking out bases. I don't think they will be much incentive for those who know the futility of this strategy.

While the Japanese Command may not have believed it in 1942, the heyday of the battleship had already passed. When naval battles were fought between ships several hundred miles apart, the nature of naval warfare had drastically changed. To give almost as many victory points for battleships as for carriers makes no sense, and battleship values were reduced from 120 to 65-75.

In the original game an AP was worth two points each turn it unloaded and eight points when it was completely unloaded, eight turns later. I wanted to place more emphasis on APs, so I increased their value by making them worth three points each turn they unload and only two points after being completely unloaded.

The other ship that was drastically undervalued was the AO. While I hate supply rules in general and am happy *FLAT TOP* doesn't get bogged down in them, oilers deserved more respect (we all know the price we pay for gas today). They are also required to be in a TF with at least one other non-AO ship so players can not just hide them by themselves in a faraway corner of the board.

The number of points for an unnecessary plane loss was raised from eight to ten. As a player, I never knew whether the eight was instead of two or in addition to it, so I settled it. I also tried to clarify what counts as a unnecessary loss. Air Factors that can reach a hex where landing *was* possible, but is not when they arrive because of hits scored on bases or plane-carrying ships, are not unnecessarily lost.

Other Changes

There were quite a few other changes, most of which were extremely minor.

1. "Each hit on a base with solely SP PH reduces the base's LF by -1/-1, not -2/-1 like other bases." There is no runway to destroy at seaplane bases.

2. "If a plane-carrying ship or base has any plane units in the Ready box and/or Just Landed box when it receives one or more hits from dive bombing or level bombing attack, these hits are all doubled. Similarly, if a plane-carrying ship has any plane units in the Readying box when it receives one or more hits from torpedo bombing attacks, these hits are all doubled." This rule reflects the different areas of the ship which are hit by different types of attacks.

3. "If a situation occurs where some Air Factors of the same plane name in the same Air Formation land while others remain in flight, some use an RF while others don't, or some join the Air Formation after others have been in flight for one turn or more, players should be careful to keep track of which Air Factors must land at which times. The Notes Section can be used to take notes of this kind. Alternately, in these cases, players may keep Air Factors in more than one Air Formation box, using a similar system to that described in rule 4.1.3." This situation occurs frequently when your carriers have been sighted, since you begin to continuously put up Air Formations on CAP. There was no mention of how to handle this in the original rulebook.

4. "A player may destroy any of his own Air Factors that are on the ground at a base or on a plane-carrying ship at any time during his Plane Movement Phase." When a player loses one of his two carriers and does not have enough room for all his carrier planes on his remaining carrier, this rule allows him to throw planes overboard if necessary and choose which planes he will keep. "A player may choose to scuttle a ship during the Task Force Movement Phase." In the same vein, though I can't remember the specific case that convinced me to include this rule.

5. "Planes may change altitude in each hex they move into after entering the new hex. An Air Factor that remains in the same hex during a turn may change altitude." This rule clarifies exactly when and how many times an Air Formation can change altitude during its move. It also allows mountain hexsides some significance. "Planes may only land if they enter the hex they will land in at low altitude." Along with the prior rule, this prevents Air Formations from incredible feats to avoid interception, and forces some logical planning. "On the turn of takeoff, armed planes may not go to high altitude; unarmed planes may." This rule negates the unrealistic advantage of the player with the initiative being able to send bombers to high altitude on the first turn.

6. "Planes landing in a Storm hex use the Night Landing Chart (if it is a night turn, there is a +1 modifier)."

7. "Even one ship is considered, and must be, a TF." I could never understand why one ship was automatically considered an observed unit and had to be placed on the mapboard. It would seem harder to find one ship than a TF with ten or fifteen ships. This rule deletes the exception and makes all TFs equal.

8. I deleted the rule that prevented planes from remaining in an enemy hex after engaging in combat. I simply did not see any reason why this rule was included in the original game. While some players may not like it when an opponent flies an Air Formation of fighters into one of their base hexes and remains for a few turns to try to discourage take offs and landings, there does not seem anything unrealistic about this tactic. Both sides can do it and the limitations of movement and range are still in force.

9. "They [ships] may not move in the turn they anchor." "Anchored ships that wish to up anchor do so by simply removing the Anchor marker; they may not move in the turn they up anchor." Both the process of anchoring and of up anchoring takes time and the two are now equal.

10. "If the [initiative] die roll is a tie, the player who did not have the initiative last turn has the initiative this turn." A simple rule that gives some small solace to those unlucky souls.

Optional Rules

One of the toughest decisions to make when working on a game is what to put in the game and what to leave out. I really don't believe a game needs optional rules. Everything that should be in the game is in the game. This is the version that has been playtested. If you want optional rules, you can make them up yourself. Unfortunately, most people like the chance of adding the little extras optional rules provide.

It will always be possible to add more rules to *FLAT TOP*. The optional rules that were included in the rulebook were selected from many applicants. (More are presented in a later article by playtester Don Gilman). Some people will argue that *FLAT TOP* is a complex game and that nothing that is added will substantially increase the complexity. My argument is that you must draw the line somewhere. When I finished the basic rules of *FLAT TOP*, I had reached my limit.

A new optional rule allows plane names that act primarily as interceptors to ready quicker than other planes by moving through more than one TF or base box per turn. Another requires bombers to take more time readying by mandating that they use two ready factors instead of one for each box they move into.

Other new optional rules dealing with planes are:

1. Planes may now land armed but must use the Night Landing Chart. One playtester assured me this rule was beneficial. Planes may also land at

damaged bases in excess of the base's current LF, but must also consult the Night Landing Chart.

2. The number of Victory Points for land-based planes is reduced to one, while carrier planes are still worth two points each. This is another rule that adds emphasis to the focus of the game: carrier tactics. A lot of time is often spent sending strikes from Port Moresby against Lae and vice versa. When I put this rule in I thought it would help deter some of this, but it probably encourages more of this, if anything.

3. For those who want to emphasize altitude more, a rule is presented that makes plane movement twice as slow at low altitude as high.

4. Another rule that I wanted to put in the basic game but resisted gives distances in hexes between off-board bases and the board. This is a much more accurate system, and while it takes a little book-keeping, it is recommended.

5. For players who want a wilder game there is a rule called Chance Combat, which allows air-to-air combat in any hex, regardless of TF or base presence.

6. Other rules add skip bombing and strafing attacks.

For ships, the following new optional rules are presented.

1. The rules on fueling have been detailed and clarified. For instance, fueling cannot take place in a storm hex.

2. The towing rules were also expanded.

3. Ships may rescue survivors, which are worth victory points (both enemy and friendly). However, you have to get them pretty quick or all you get is their life preservers.

4. A TF Organization rule allows planes to attack ships that would generally be on the fringe of the TF (such as CLs and DDs) without being subjected to anti-aircraft fire from all ships in the TF.

5. All ships may reload ammunition at a friendly base. This rule should be used in the longer versions of the scenarios.

Two other optional rules deal with alternate ways to establish the initiative and plane movement sequence. For instance, players can alternate moving Air Formations one at a time instead of one player moving all his first. This takes more time but can add interest and tactics on some turns.

Changes I Didn't Make

The thing I got the most flak about from the playtesters was submarines.

Fact. Submarines never took part in any of the actions during the time frames of any of the scenarios. Submarines did damage ships (like the sinking of the CV *Wasp*) in the Coral Sea, but it was before or after battles entailed in the game.

Fact. Submarines are more trouble than they are worth in game terms. Their reduced speed and limited attack capabilities does not recreate their function and ability well in *FLAT TOP*. A game on carrier warfare can't be everything. Submarines were sacrificed so other more important rules could flourish.

One playtester suggested a section on optional victory conditions. Before the game began, players could secretly choose their objectives. This would definitely have been included, but it never appeared on my desk.

The number of other proposals was staggering. Rules varying the number of day and night turns at different times of the year, using incredibly detailed weather patterns, and adding an astonishingly complicated carrier operations sequence all died a noble (and justifiable) death.

Strategy

FLAT TOP is not an easy game on which to discuss strategy. Or perhaps most of the strategy just seems obvious to me.

The biggest consideration that players are faced with every game deals with launch factors. When the enemy has been sighted and it's time to send a strike, there are two choices. Send one massive strike or send two or more waves. The Strike Chart is similar to the Range Reference Table than was in the original game. From this, players can help determine which is the better method.

The situation will dictate, of course, but in general a large strike is more effective. Less planes are lost to CAP and anti-aircraft and there is a greater hit potential. The disadvantage is range and time. A large Air Formation usually must waste one turn forming up because the number of planes taking off forces them to make maximum take offs. This greatly reduces the range and delays the strike.

Wave attacks can be made from much further away and will hit the target one or two turns earlier. However, each wave will be subjected to CAP and anti-aircraft fire.

Seems like one large strike would always be the answer, right? Wrong. Take the following example. You've just sighted an enemy TF with carriers. He hasn't sighted you yet, but his search planes are nearby. If you launch a small strike now, he may be taken completely by surprise and not have any CAP up when they get there. You might get lucky and sink a carrier before he is able to launch any of its planes. If you wait to form up a large strike, his search planes may find you and he'll be alerted to your attack. Which shows why the choice is not always as obvious as it seems.

Related to the strategy of strike organization is TF organization. When you have two carriers, should they both be put in one TF or should each be put in a separate TF. Of course, if you don't have enough ships to make two solid TFs, there is no choice, but if you do, this a major decision.

Putting two carriers in one TF with the ships that have the best anti-aircraft factors seems to be indisputably correct. Again, not so. For one thing, two TFs are harder to find than one. One TF can steam along several hexes behind the other. It's like carrying a derringer as well as a six gun. You can put up twice as much CAP over the sighted carrier and none over the unsighted one and the enemy will be a little surprised. Or, you can launch a strike from the unsighted carrier that the enemy won't expect since he's watching the other carrier. Finally, when carriers are in more than one TF, attacking planes often only attack one TF and many times find they can inflict more hits than they need. If there was another carrier in the same TF, it would also be attacked, but if the other carrier is in another TF even one hex away, it cannot be attacked.

Food for thought. But there are other considerations too. Players must consider the ability of a TF to protect a carrier during surface combat.

STRIKE CHART

Air Formation Composition	Minimum Launch No Combat	Minimum Launch Combat	Normal Launch No Combat	Normal Launch Combat	Maximum Launch No Combat	Maximum Launch Combat
Dauntless Devastator Wildcat (same without Wildcat)	12	12	9	9	6	6
Dauntless Avenger Wildcat (same without Wildcat)	21	14	18	11	14	7
A20	27	18	23	14	18	9
Avenger	28	21	25	18	21	14
Beaufighter	27	18	23	14	18	9
Beaufort	28	21	25	18	21	14
B-17	48	40	44	36	40	32
B-25	27	27	23	23	18	18
B-26	30	20	25	15	20	10
Catalina	60	54	57	51	54	48
Dauntless	27	18	23	14	18	9
Devastator	12	12	9	9	6	6
Hudson	35	28	32	25	28	21
P-38	24	24	18	18	12	12
P-39	22	22	17	17	11	11
P-40	22	22	17	17	11	11
Wildcat	24	16	20	12	16	8
Betty	45	36	41	32	36	27
Dave	12	8	10	6	8	4
Emily	108	99	104	95	99	90
Judy	33	22	28	17	22	11
Jake	20	20	18	18	15	15
Kate	21	21	18	18	14	14
Mavis	88	88	84	84	80	80
Nell	32	24	28	20	24	16
Pete	12	8	10	6	8	4
Rufe	27	18	23	14	18	9
Val	27	27	23	23	18	18
Zero	40	30	35	25	30	20
Val Kate Zero (same without Zero)	21	21	18	18	15	15

Note: All Air Formations are assumed to take off from and land at the same base or plane-carrying ship.

They must consider how carriers in two TFs hurt their own ability to launch a large combined strike. They must consider how the mobility of each TF is affected.

Related to both of these other considerations (strikes and TF organization) is search plane strategy. Or simply, how many search planes is enough? In most scenarios, players will only use those planes for searching that were intended to be used in this manner (Catalina, Mavis, etc.). For those who would rather be safe than sorry, more planes must be used.

The Allied player has some other planes that are quite effective as search planes. The B-17s, and even Hudsons, are great for searching small areas around bases, allowing the Catalinas to search areas further out to sea. The Japanese player can use Zeroes or Bettys.

A tactic that is not often employed, but which must be in the Midway scenario that follows this article, is using carrier planes to search. At Midway, the Japanese player must search and he has no land-based planes in range. The disadvantage to this is that it gives away the position of the carrier. In addition, carrier planes do not have much range and it becomes a constant headache to keep a round-the-clock shift of search planes in the air. Players will rarely use carrier planes to search in *FLAT TOP* scenarios for these reasons, but the game sure does get interesting when they must.

The use of CAP is the final tactical consideration that deserves mention. Ideally, a player wants to have all his CAP up on every day turn over his carriers. Realistically, this isn't possible. Another choice between two possibilities. One, to put up CAP in shifts, splitting the number of interceptors into two groups, one of which is always in the air. Or two, to not put up CAP till a strike is on the way and then put it all up at once.

The advantage to the half-and-half method is that you always have some protection. The disadvantage is that the protection may be even less than half as effective in air-to-air combat. The advantge to not splitting is a strong air-to-air combat ability. The disadvantage is that the planes may go down with the ship before they ever get off the deck.

In all of these considerations, you must decide which is the right course of action. That's what makes the game fun. It is also what makes the game so intense. I have always thought that games with hidden movement were the most exciting. *FLAT TOP* is one of the few games in which a hidden movement system works flawlessly. I urge you to take the time to struggle through the learning process so you can savor the joy of gaming at its very best.

The Scenarios

Several people nagged me to make the shortest version of each scenario the basic version and have the longer versions as the optional ones, the opposite of how it is. The next statement may surprise some of you who play the game. I have never played any of the shorter versions!

I always play the full scenario. I guess I'm one of those people who always plays the campaign game before the scenarios, who always reads the whole rulebook even when it's programmed instruction, who always punches out the counters before reading the rulebook. What a rebel! Who knows, I might order chocolate ice cream one day instead of vanilla.

While 109 turns is a heck of a long game of *FLAT TOP*, the Coral Sea scenario is my favorite. Only once did the game go the whole way. Usually, we quit after the first big strikes had been exchanged, since it was then obvious who would win. Rarely did the APs actually get to Port Moresby, because the game had usually been decided beforehand.

SCENARIO SIX

"Midway"

By Alan R. Moon

If you own the AH version of *FLAT TOP*, you may have wondered why many plane and ship counters that are not used in the scenarios are included in the game. Here's your answer.

Back in the Vol 15, No 5 issue of *THE GENERAL*, I had an article entitled "The Pacific Theatre Via MIDWAY", The article introduced the Coral Sea scenarios for *MIDWAY*. This article reverses that and introduces a Midway scenario for *FLAT TOP*.

This scenario uses a *D-DAY* blank hex sheet (available from Avalon Hill for $1.50 each, or 4 for $5.00). The illustration is a reduced version of this size hex sheet and shows the Map Sectors, Directional hexes, off-board entry hexes, and the Midway base.

"Midway"

Time: 0100 4 June—2400 6 June (72 turns)
Weather: Scattered Clouds (use eight Cloud markers in each sector)

Allied Order Of Battle
Ships: CV Enterprise, CV Hornet, CV Yorktown, CA Minneapolis, CA New Orleans, CA Northampton, CA Pensacola, CA Vincennes, CA Astoria, CA Portland, CL Atlanta, 17DD, 12SS

Sea Based Air: 26 Wildcat, 37 Dauntless, 14 Devastator

Bases: Midway, Hawaii, Johnston Island

Land Based Air:
At Midway: 2 Wildcat, 6 Dauntless, 7 Buffalo, 5 Vindicator, 2 Avenger, 1 B-26, 3 B-17, 8 Catalina
At Hawaii: 6 B-17, 2 B-24
At Johnston Island: 2 Catalina

Ships Starting Positions: All ships must begin in any hexes in hex rows U-YY.

Japanese Order Of Battle
Group One
Ships: CV Akagi, CV Kaga, CV Hiryu, CV Soryu, CAV Chikuma, CAV Tone, BB Haruna, BB Kirishima, CL Nagara, 12DD

Sea Based Air: 25 Zero, 30 Val, 23 Kate, 1 Judy, 2 Jake, 3 Pete

Ships Starting Positions: All ships must begin in any hex within area A.

Group Two
Ships: CL Jintsu, 10DD, 15AP, 3PG

Ships Starting Positions: All ships must begin in any hex within area B.

Group Three
Ships: CVL Zuiho, BB Hiei, BB Kongo, CA Atago, CA Chokai, CA Haguro, CA Myoko, CL Yura, 8DD

Sea Based Air: 4 Zero, 4 Kate

Ships Starting Positions: All ships enter on 0300 4 June in any of hexes A15-A25.

Group Four
Ships: AV Chitose, AV Kamikawa, CA Kumano, CA Mikuma, CA Mogami, CA Suzuya, 3DD

Sea Based Air: 10 Pete, 3 Dave

Ships Starting Positions: All ships enter on 0400 4 June in any of hexes A30-A35.

Group Five
Ships: CVL Hosho, BB Mutsu, BB Nagato, BB Yamato, AS Chiyoda, AS Nisshin, CL Sendai, 9DD

Sea Based Air: 3 Kate

Ships Starting Positions: All ships enter on 1200 4 June in any of hexes A1-A5.

4SS

Base: Marshalls

Land Based Air: 5 Mavis

Special Rules
1. Allied CVs and Midway have radar.
2. The Japanese APs may unload only in the Midway hex. If the Japanese unload 250 or more Points in the Midway hex, the base becomes a Japanese base for all purposes on the next turn. Any Allied planes remaining at the base are considered eliminated.
3. The Wildcats have a BHT of 7 for Air to Air Combat.
4. The six Dauntless that begin the game at Midway may not make Dive Bombing attacks.
5. Only Kates may land or take off from CVL Hosho.
6. AS Chiyoda and AS Nisshin each have one midget submarine on board. These subs can only be launched in the Midway hex and must remain in the Midway hex at all times. To launch or retrieve its midget submarine, an AS must not move that turn. A midget submarine has no AAF, and has only one attack factor. Use blank counters for midget submarines.
7. OPTIONAL RULE. Allied submarines may not be setup within five hexes of any hex where Japanese ships begin the game or enter the game. This rule is only in effect if the Submarines rule is in effect.

Special Victory Conditions
1. Automatic Victory Level: 300 Points
2. The Japanese player must unload 200 or more Points or the Allied player wins.

Base Information
Midway
MC—36; LF—16/6; RF—9; PH—LP, SP; AAF—24; SF—8

Hawaii
MC—Infinite; LF—Infinite; RF—Infinite; PH—LP, SP

Johnston Island
MC—12; LF—6/3; RF—4; PH—LP, SP

Marshalls
MC—Infinite; LF—12/6; RF—6; PH—LP, SP;

FLAT TOP MIDWAY VARIANT MAP

The GENERAL, Vol, 18, No. 6, 1982 T.A.H.G.C.

Coral Sea has the smallest number of land-based planes and ships. The objectives are clear cut and the game proceeds quickly until one side sights the other's carriers. In the Coral Sea, both players are trying to win the game by sinking the other's carriers. If the Allied player can sink the Japanese carriers, the Japanese APs will be sitting ducks. If the Japanese player can sink the Allied carriers, the APs will be virtually unopposed when landing. It is a nice way to begin playing *FLAT TOP*.

A large step up is the Eastern Solomons scenario. The number of land-based planes is almost doubled for the Allied player (close to 100). The number of carrier planes is almost doubled for both sides. The Japanese player has quite a few more ships and can unload his APs in two places instead of one.

While the number of turns is down to 66, it can often take much longer than the Coral Sea game. Usually, this game will not be decided after only one strike, since both players have three carriers. In many games, the points awarded to the Japanese player for unloading the APs will be the difference between victory and defeat.

In Eastern Solomons, the Allied player must prevent the Japanese APs from landing at either Gili-Gili or Guadalcanal. He cannot just go searching for the Japanese carriers. He may well have to split his carrier force to defend properly. The Japanese player, on the other hand, must decide where to send his APs and whether to play aggressively with his carriers and search out the Allied CVs or lay back and protect his APs.

When carriers are sighted, each turn in the game can take an hour or more as players land, take off, and ready planes and resolve combat. It can get very hairy. It is, however, probably the best scenario because of the strategic and tactical considerations that confront both players.

Santa Cruz can be the least interesting of the scenarios, but this depends on how the Japanese player sees the game. If one of the players is more aggressive than the other, he should be the Japanese player. The reason is that there are no APs and the game is just a carrier battle. If neither player wants to fight, there is no specific reason to do so. I added a rule that a player must have scored at least 200 points to win or it is a draw in an effort to entice aggressive play.

The problem is that even though the Japanese player has more carriers, he has only a few more carrier planes and these are offset by the number of land-based planes (well over 100) the Allied player has.

The best Japanese strategy may be to wait for night and then move in on Guadalcanal, bombard Henderson and hope to engage the Allied fleet in surface combat. The best Allied strategy is probably to sit to the south of Guadalcanal and hit the Japanese fleet from the carriers as they move south in the afternoon or flee in the morning.

The Allied player will probably spend quite a bit of time attacking with planes from Port Moresby but this is a side action. The real battles, the ones that decide the game, will be fought near Guadalcanal. This scenario is worth a few playings, but not nearly as good as the first two. (Can often be 66 turns of relative boredom.)

Most people think the Guadalcanal scenario is not as good as the first two scenarios, but it has its own merit. Neither side has many carrier planes and the Allied player has only one carrier. Both sides have quite a few land-based planes (the Allied player has over 125).

The scenario is interesting because both sides have APs and both are trying to land them at Guadalcanal. The objectives are the same for both sides and it is a slugfest right from the beginning. No weaving and bobbing, it's all "go for the throat".

Both sides are forced to come in close to Guadalcanal to protect their APs. The chance for surface combat is great and slightly favors the Japanese player. However, this is offset again by the number of Allied land-based planes. Carrier planes are about equal. Though 79 turns is a long game, it will rarely go the distance. The Japanese APs will probably either have unloaded or been sunk before the second day is over.

Final Comments

I'm pretty sure I've made my feelings clear about *FLAT TOP*. Craig Taylor (the designer, in case you didn't notice) will never design a better game than this one. It is a shame many gamers will not try it, because it belongs on every gaming shelf. My work on *FLAT TOP* was both some of the best and worst times I've had at Avalon Hill. ☆

PLANE NAME SPECIFICATIONS

	N	MF	RF	Air to Air	Air Modifier	
Buffalo	B	7	6	7	(0)	interceptor, escort
Vindicator	V	7	5	3	(0)	interceptor, bomber
B-24	N	8	15	3	(-1)	bomber only

	Air Attacks Vs. Ships				
	Level Bombing High Altitude	Level Bombing Low Altitude		Dive Bombing	Vs. Subs
	AP	GP	AP	GP	AP	
Vindicator		1	5	3	6	1
B-24	3					

SHIP SPECIFICATIONS

	Ammunition Factor	MC	LF	RF	PH	TF
CV Akagi	12	30	12/3	8	CV	
CVKaga	12	30	12/3	8	CV	
CV Hiryu	12	24	8/3	7	CV	
CV Soryu	12	24	8/3	7	CV	
CVL Hosho	16	7	3/1	3	CV	
BB Yamato	28					
BB Nagato	24					
CA Mikuma	12					1
CA Mogami	12					1
AS Chiyoda	12					
AS Nisshin	12					

ORDER BY PHONE TOLL FREE

If your favorite game store does not have the game you want in stock and you have a valid American Express, Master Charge, or VISA credit card, call our Toll Free number 800-638-9292 from anywhere in the Continental United States except Maryland to place your order. Our prompt mail order service will then speed your order to you with our usual lightning dispatch. You must give the order taker the number, expiration date, and name of your credit card along with your order and shipping address. We ship UPS wherever possible. If you prefer Parcel Post, be sure to specify this.

The Toll Free number is good only for ordering games or other merchandise from Avalon Hill by credit card payment. No C.O.D. orders can be accepted. The operator will be unable to answer game questions or switch calls to someone who can.

Maryland residents must call 301-254-5300 and ask for extension 34. Absolutely no collect phone calls can be accepted. The Toll Free number is not valid in Maryland.

WE WANT YOU . . .

to write for the *GENERAL*. If you can string words together into an interesting article format on any Avalon Hill wargame, there's a good chance you're just the person we're looking for. You can supplement our literary staff with articles of strategy, game analyses, Series Replays, commentaries, new scenarios, or variants.

All articles should be type-written, double-spaced and accompanied by a self-addressed envelope bearing first class postage. Otherwise, rejected articles will not be returned. Articles should be supplemented with illustrations and/or charts whenever possible.

Commencing with the January, 1977 issue the *GENERAL* will pay $6 per running 10" column of edited text. Letters to the Editor are not subject to remuneration. Alternatively, authors may elect to take their remuneration in the form of Avalon Hill products, paid at the rate of 150% of the cash remuneration. Note that illustrations and decorative type faces are not subject to remuneration except by prior agreement with the editor. It is generally expected that articles will be accompanied by sufficient illustrations as a requirement for acceptance.

At the end of each calendar year an EDITOR'S CHOICE article will be selected. The author of this article will receive a $100 bonus and a lifetime subscription to the *GENERAL*.

DESIGN ANALYSIS

FLAT TOP Errata

By Alan R. Moon

I have explained the changes and the reasons for these changes in the AH revision of *FLAT TOP* in the article in this issue entitled "ON DECK". And now it's time to present all the goofs I made.

3.3.1, second line—"A" should read "B".

3.3.2, second line—"B" should read "A".

6.6, first sentence—should read "Planes may not enter a Storm hex unless they must land immediately and the base is in a storm hex."

6.6, seventh line—"+1 modifier" should read "−1 modifier".

6.7—add "A unit in a Storm hex cannot be observed."

6.10, second line—"(towards the Wind Direction marker)" should read "(towards the wind direction as shown by the Wind Direction marker)".

6.10—add "A CV or CVL that moves only one hex or does not move at all during a turn is assumed to have moved into the wind."

7.3.2—should read "If the result is a '-', the Air Formation may not observe during that turn. It may move normally but must remain on the mapboard."

7.3.3—add "If it is a night turn, one is added to the Search Table die roll."

Add "**7.3.5** Air Formations that are not on the mapboard at the beginning of the turn may not consult the Search Table and may not observe anything this turn."

7.6, fifth line—"move" should read "are".

7.9—should read "Only units that themselves are on the mapboard can be used to observe other units. This includes Air Formations of the non-moving player that are on the mapboard (even Air Formations that could not or did not observe during their own Plane Movement Phase). Bases and coastwatchers are always considered to be on the mapboard, and thus can always be used for observation."

Add "**7.9.1** Coastwatchers can observe planes over any all-land hex of the island their symbol appears in. If the hex is clear, the Condition Number is 3. If the hex contains clouds, the Condition Number is 1. Coastwatchers can observe planes over any partial-land hex of the island their symbol appears in. If the hex is clear, the Condition Number is 2. If the hex contains clouds, the Condition Number is 1. Coastwatchers can observe planes in any all-sea hex adjacent to any partial land hex of the island their symbol appears in if the hex is clear; the Condition Number is 1."

Add "**7.9.2** Coastwatchers can observe ships in any partial-land hex of the island their symbol appears in; the Condition Number is 2. Coastwatchers can observe TFs in any all-sea hex adjacent to any partial land hex of the island their symbol appears in; the Condition Number is 1."

Add "**7.9.3** Coastwatchers cannot observe planes in a hex with an enemy base."

Add "**7.9.4** The Japanese Coastwatcher symbol on New Guinea only affects hexes inside the Japanese Coastwatcher Perimeter Line shown on the mapboard by a black dotted line. The Allied Coastwatcher symbol on New Guinea affects all hexes on the island."

8.1 second line—delete "A".

8.5.5 In the diagram, the abbreviation for Port Moresby is wrong; it should be "M".

8.5.6, Example, first line—"10" should read "12".

8.12.1, third line—add "Rufe" after "Wildcat".

10.2 The example shows an incorrect way of marking the turns for TF movement. Each "1" should be replaced with "0100", each "2" with "0200" and each "3" with "0300".

11.1—add "No shadowing is allowed on night turns."

11.3.2 and **11.3.3** (clarification)—Players who want to maintain absolute secrecy can use a slightly weird system for shadowing die rolls. The shadowing player must close his eyes when rolling the die. The player with the TF looks at the number rolled then picks up the die, without telling the shadowing player what number was rolled. The shadowing player can then open his eyes and the player with the TF informs him whether he can shadow or not.

Add "**12.10** An AO must be in a TF with at least one other non-AO ship at all times."

14.3 first sentence should read—"Each Air Factor has a Movement Factor (hereafter referred to as MF) as shown on the Plane Data Chart on the Air Record Sheet."

14.14, last line—"+1 modifier" should read "−1 modifier".

15.2 sixth line—"sea" should read "all-sea".

16.—should read "Air-to-Air Combat involves only plane units. Only interceptors can initiate Air-to-Air Combat; escorts and bombers cannot initiate it."

Add "**16.1.1** If both sides have planes in a hex with a ship or base and one side has interceptors, the interceptors can automatically initiate Air-to-Air Combat; the other side may not avoid it. If both sides have interceptors, combat can be initiated by either side and the other side may not avoid it. The Interception Table is not used."

Add "**16.1.2** If both sides have planes in a hex which is one or two hexes from a plane carrying ship or base and one side has interceptors, the interceptors may attempt to initiate Air-to-Air Combat. The player must consult the Interception Table to see if the attempt is successful."

Continued on Page 14, Column 3

CONVENTION CALENDAR

THE GENERAL will list any gaming convention in this space free of charge on a space available basis provided that we are notified at least four months in advance of the convention date. Each listing must include the name, date, site, and contact address of the convention. Additional information of interest o Avalon Hill gamers such as tournaments or events utilizing AH games is solicited and will be printed if made available.

Avalon Hill does not necessarily attend or endorse these gatherings, nor do we guarantee that events using AH games will be held. Readers are urged to contact the listed sources for further information before making plans to attend.

MAY 7-8-9

NIAGARA GAMEFEST, St. Catharines, ONT
Contact: Keith Siren, P.O. Box 457, St. Catharines, Ontario CANADA L2R 6V9 (416-682-1438).

MAY 21-22-23

CWA CON 82, Chicago, IL
Contact: Chicago Wargamer's Association, P.O. Box 10397, Chicago, IL 60612. *NOTE:* Wide assortment of events including many AH game tournaments.

MAY 28-29-30-31

GRIMCON IV, Oakland, CA
Contact: P.O. Box 4153, Berkeley, CA 94704. *NOTE:* Fantasy-SF.

MAY 30

M.I.G.S. III, Kitchener, ONT
Contact: Les Scanlon, 473 Upper Wentworth St., Hamilton, Ontario, CANADA L9A 4T6.

JUNE 4-5-6

GENGHIS CON IV, Denver CO
Contact: Denver Gamers Association, P.O. Box 2945, Littleton, CO 80161 (303-798-1404).

JUNE 11-12-13

MICHIGAN GAMEFEST, Detroit, MI
Contact: Metro Detroit Gamers, P.O. Box 787, Troy, MI 48099. *NOTE:* Many AH events among a wide range of gaming activities.

JUNE 18-19-20

RIVER FOREST MICROCON, River Forest, IL
Contact: River Forest Community Center, 414 Jackson, River Forest, IL 60305. *NOTE:* DIP, SL.

JUNE 25-26-27

HEXACON, Toronto, ONT
Contact: Les Gray, 42 Rogers Road, Toronto, Ontario CANADA M6E 1N7 (416-654-2961). *Note:* Many AH events among a wide variety of gaming activities.

JULY 3-4

FIRST ANNUAL ATLANTA SQUAD LEADER OPEN, Atlanta, GA
Contact: D. R. Munsell, 2327 Dayron Circle, Marietta, GA 30062 (404-973-6040). *NOTE:* Five round, round-robin *SL* tournament.

JULY 9-10-11

ATLANTA WARGAMING CONVENTION, Atlanta, GA
Contact: A.S.G.A.R.D., P.O. Box 90952, East Point, GA 30364. *NOTE:* SL

JULY 23-24-25

ORIGINS 82, Baltimore, MD
Contact: Atlanticon, Inc., P.O. Box 15405, Baltimore,MD 21220. *NOTE:* The National Adventure Gaming Show including many AH sponsored events among a wide range of other gaming activities.

JULY 24-25

KOMMAND CON '82, Mansfield, OH
Contact: Kommanders Wargaming Club, P.O. Box 2235, Mansfield, OH 44905.

AREA TOP 50 LIST

Rank	Name	Times On List	Rating	Previous Rank
1.	K. Combs	26	2604XOS	1
2.	D. Garbutt	24	2188EHL	2
3.	D. Burdick	25	2177FDL	3
4.	B. Sinigaglio	11	2188FHH	4
5.	P. Siragusa	19	2026CGH	5
6.	L. Kelly	19	2021VVZ	6
7.	J. Kreuz	2	2016FGK	7
8.	J. Zajicek	29	2004GJP	9
9.	J. Beard	15	2003FFL	10
10.	F. Preissle	23	1998KLW	16
11.	D. Barker	33	1997GHM	11
12.	M. Sincavage	15	1979DEI	12
13.	R. Leach	28	1952HLQ	13
14.	F. Freeman	19	1924EEF	14
15.	F. Reese	6	1910DGE	15
16.	J. Sunde	1	1886JJR	—
17.	B. Remsburg	9	1874FGM	17
18.	J. Anderson	2	1859CDE	18
19.	P. Ford	6	1850ECK	20
20.	T. Oleson	35	1841VWZ	8
21.	G. Charbonneau	2	1827LEH	21
22.	P. Flory	2	1818CEG	22
23.	I. LeBouef	14	1811IJR	34
24.	D. Giordanno	6	1802EDG	24
25.	R. Hoffman	12	1798EGL	25
26.	K. Blanch	28	1797HJN	26
27.	N. Cromartie	11	1796GGO	44
28.	F. Ornstein	9	1796GGK	27
29.	D. Munsell	21	1785FEI	33
30.	N. Markevich	18	1782CEF	28
31.	C. Olson	9	1778DEJ	19
32.	R. Beyma	1	1774CCD	—
33.	J. Wirt	4	1773CEE	30
34.	B. Schoose	6	1772EGK	31
35.	F. Sebastian	21	1758FHN	35
36.	B. Scott	22	1756IHQ	23
37.	D. Greenwood	26	1756FFI	36
38.	R. Phelps	7	1755EFK	29
39.	E. Miller	12	1754GJO	37
40.	C. Wyatt	2	1754CEG	41
41.	G. Smith	3	1741DDI	39
42.	S. Martin	19	1737FHJ	40
43.	C. Wannall	2	1735FIM	49
44.	W. Knapp	20	1728JLS	42
45.	J. Mueller	5	1726JLS	38
46.	B. Downing	15	1726EHJ	43
47.	R. Rowley	2	1720EHM	48
48.	R. Zajac	6	1719FGH	45
49.	D. Eisan	1	1704GDG	—
50.	D. McCarthy	12	1701EGK	39

MEET THE 50 . . .

Bruno Sinigaglio is 35, married and father of two, has a B.S. in Chemical Engineering, and is employed as a mechanical engineer in Delta Junction, Alaska.

Favorite Game: 3R
AREA Rated Games: STAL, AK, WAT, 1776, PL, BB, AL, TRC and FE
AREA W-L Record: 25-3 **% Time PBM:** 50%
Gaming Time/Week: 4/5 hrs. **Play Preference:** FTF
Hobbies: sports, baiting members of AH staff
Pet Peeve: Rolling "Defender Retreats" against Russians in Woods in TRC

Mr. Sinigaglio has a wealth of experience in competition play, with which he was quite happy to regale us. Winning the AH 500 Tournament he considers the apogee of his wargaming. Conversely, he views "capturing Allied Home Base in II May 1941 [AK] Turn during AH 500 Championship Game in 1978 and then losing the game" as his worse experience. Asked about the funniest episode in his brilliant career, Bruno once again told of "rolling up every supply unit as Germans and then taking Tobruk with a 1-2 attack against Don Greenwood in 1973 Sparta East Coast Championship."

On the subject of the role of history in playing wargames:

"I think military history enhances the enjoyment of playing a wargame. When you have knowledge of a particular battle, the game itself is more fun. The historical knowledge enhances the flavor of the game. You can also use such knowledge to bore your opponent, thus increasing the chance of mental errors on his part."

AHIKS

AHIKS (pronounced A-hixs) is an international society of mature individuals who play historical simulation games by mail. Established in 1966 by adults who were tired of easy, immature, sporadic, and/or disappearing opponents, AHIKS exists to minimize encounters with such opponents and to facilitate playing by mail.

AHIKS is a society. We take pride in the high degree of personalization which has characterized AHIKS from its inception. Many members have become the best of friends over the years, and frequently members get together for face-to-face games or even conventions.

AHIKS is indeed international, and we hope to expand our international contacts. While a majority of our members currently reside in the United States, there are sizeable contingents of Canadians and overseas Americans affiliated with our US-headquartered regions, and roughly a fourth of the membership consists of Europeans affiliated with our region headquartered in England. Total membership is approximately 500.

Our success as an international organization, as measured by the number of games underway between opponents of different nations, was made possible by our ICRK (pronounced "irk") system. This marvelous invention eliminates the need to refer to stock publications or other paraphernalia, while cutting across border, language, and time difficulties. Thus game situations requiring die rolls can be resolved in the same convenient and foolproof manner whether your opponent is across the street or across the ocean.

AHIKS membership is open to members of all races, creeds, and nationalities, as well as to members of both sexes. One membership requirement is that all members must play their games promptly, courteously, and to completion. The other is that members (with a few exceptions) must be 21 or over.

If you enjoy gaming, can you really afford not to join? For additional information, and/or for membership application forms, please contact:

Bruce Maston, MD
1404 Union Street
Schenectady, NY 12308

or Alan D. White
77 Brackley Road
Hazlemere
High Wycombe
Bucks HP15 7EY, U.K.

AVALON HILL HATS

Yes, now you too can proclaim your game company loyalties to one and all from underneath your Avalon Hill baseball cap. These navy blue beauties come in "One size fits all" and are guaranteed to clash with *SQUAD LEADER* and *PANZERBLITZ* t-shirts. Send $7.00 plus 10% postage (20% for Canadians, 30% overseas) to Avalon Hill, 4517 Harford Rd., Baltimore, MD 21214. Maryland residents add 5% state sales tax.

DESIGN ANALYSIS . . . *Continued from Page 13*

Add "**16.1.3** The player with the interceptors can choose not to use all his interceptors in Air-to-Air Combat (even if they are all in one Air Formation), except when both players have interceptors, in which case they must both use all their interceptors if combat is initiated."

17.6 add at the beginning of the rule—"If some planes of one plane name are attacking one ship and some are attacking another or several others, each of these attacking groups is considered a separate plane name for the purpose of resolving AA fire."

19.8.3 fourth line—delete "DD".

21.5 Example, fifth line—delete "still".

23.1 seventh line—"AA Factor by 2" should read "AAF by 1".

25.5 add—"An AP which has been fully unloaded (has unloaded for all eight turns) is worth 2 Victory Points."

OPTIONAL RULES, SUBMARINES 8., b., seventh line—"Jake (+1)" should read "Jake (1)".

SEARCH TABLE—add the following modifier; +1 if the Air Formation begins the turn in a hex with a Cloud marker.

CLOUD MOVEMENT TABLE should read—
1 — Same Sector
2-5 — Sector the Cloud Marker was heading towards (or the same sector if the Cloud Marker was heading off a board edge)
6 — Sector I

NIGHT LANDING TABLE—add the following modifiers; −1 in a storm, −1 if armed.

COMBAT RESULTS TABLE, Number of Attacking Factors—"21-23" should read "21-25".

JAPANESE AIR HIT TABLES, Air Attacks Vs. Bases, Level Bombing Low Altitude, Dave/Jake/Pete—delete "1" (should be a dash).

OBSERVATION TABLES—delete "Coastwatcher" in the two places it appears on these tables.

ALLIED AIR OPERATIONS CHART B—Gili-Gili should have an RF of "2" during E. Solomons.

JAPANESE AIR OPERATIONS CHART B—Under Rabaul "AF: 8" should read "SF: 8".

AMMUNITION RECORD SHEET—delete the AV Kamikawa since it has no Gunnery Factor.

AMMUNITION RECORD SHEET—add CA Indianapolis with an Ammunition Factor of 15.

☆

FORTRESS EUROPA PBM KIT

A Play-By-Mail Kit for *FORTRESS EUROPA* is now available. The kit contains four pages of instructions, much of this covering the conversion of many of game's special rules to facilitate PBM. Also included are the Allied and German OBs which show a picture of each unit for movement purposes. Only available direct from Avalon Hill, 4517 Harford Rd., Baltimore, MD 21214. The 1 Player Kit is $3.50 and the 2 Player Kit is $7.00, plus 10% postage (Canadians add 20%, Overseas add 30%). MD residents add 5% state sales tax.

FLAT TOP, MORE OPTIONS

By Don Gilman

FLAT TOP is a unique system in the gaming hobby. It is one of the few titles that satisfies the two extremes of playability and realism. As a game, *FLAT TOP* plays smoothly with only a smattering of logistical necessity. As a simulation, it shows the conditions of carrier warfare during the beginnings of WWII. Unfortunately, there were certain factors that affected the represented battles that were factored out to streamline the system. The purpose of this article is to provide some options that were considered too specific for inclusion in the game.

I. MINE WARFARE

INTRODUCTION

Minefields were used during the period to inhibit enemy movement in and around the many islands and ports of the region. Port defense was a major factor when the Japanese attempted to invade Port Moresby in May 1942. Other minefields accounted for the sinking of several vessels during late 1942 and early 1943. Later in the war they severely restricted reinforcement of isolated Japanese garrisons, and eventually choked the Japanese Islands to death.

PLANTING MINEFIELDS

1. Minefields may be planted in any hex where anchoring is allowed. Minefields are considered to occupy a designated hexside. The exception is when a Base is in the target hex; the Minefield is then considered a Port Minefield. Such a Minefield occupies the whole hex where ships anchor (i.e., to land troops, rearm, or to establish Seaplane Bases).

2. Minefields may be planted by ships or submarines.

3. Minefields are measured in Mine Factors; the higher the Mine Factor, the more effective the Minefield is. All minelaying ships begin the game with a number of Mine Factors; this is the maximum number of Mine Factors this ship may carry at one time. Ships may reload mines from a Depot. Depot locations and the number of Mine Factors available are listed in the *Scenario Table.*

4. After reloading (or at the start of a game), the player must record the intended primary Target Hexside and an adjacent secondary Target Hexside; use the Wind Direction Numbers to indicate hexsides. If the Target is a Port, no secondary Target Hexside is necessary.

5. To make the Minefield planting run, the minelaying ship enters the hex and exits over the hexside the Minefield is to affect. The actual hexside mined and the number of Mine Factors planted are recorded on a separate piece of paper. Submarines may not plant Minefields if they are at deep depth. Ships that plant Minefields may move one or two hexes during the turn.

6. A ship may plant less than all of its Mine Factors. The ship may keep any remaining Mine Factors on board, but must return to the Depot so a new Target Hex may be specified.

7. If the ship is attacked during a turn in which it makes a planting run, the plant is aborted. The Mine Factors remain on board the ship. The ship may attempt another planting run on a later turn.

8. If for some reason the player decides not to plant the Minefield in the intended Target Hex, then the ship must return to Depot before designating another Target Hex.

9. If a ship is observed while making a planting run, no special information is related—unless the Condition Number is "3". If the Condition Number is "3", the observing player is told that Mine Factors are present in the hex. If a submarine is making the planting run, this can only be observed by an Air Formation *and* the Condition Number is "3".

10. To reload Mine Factors, a ship returns to a Depot (designated in the scenario) and, if Mine Factors are available, may reload using the Rearming Optional Rule. Mines may be reloaded at the same time a ship is rearming ammunition and torpedoes. A Skip Bomb counter may be used to indicate Mine Factors on board.

11. The U.S. DMs were WWI four stack DDs and did not have a good cruising range. As a result, these ships have a Movement Factor of "1" unless: 1) they are within two hexes of an observed enemy unit; or 2) they are within five hexes of the designated Target Hex. U.S. DMs based at Espiritu Santo may only designate a Target Hex in Sectors III, VII, VIII, or within 14 hexes of Tulagi. U.S. DMs based at Tulagi may only plant Mine Factors in any of the previous areas or within 26 hexes of Tulagi.

12. The Japanese SSMs require three passes thru the Target Hexsides to plant their one Mine Factor.

13. Any minelaying ship with a Gunnery Factor is treated like a DD for Surface Combat.

MINEFIELD COMBAT

1. An enemy TF must be observed to be attacked by a Minefield. In most cases, coastwatchers will be able to observe TFs that enter Minefields. Any TFs that enter a hex which contains an enemy base are automatically observed. Unobserved TFs that enter a Minefield are unaffected.

2. When an observed enemy TF crosses a hexside that contains a Minefield or enters a Port Hex that contains a Minefield, the TF is attacked by the Minefield.

3. The BHT of a Minefield in an open hexside is "3". An open hexside is any hexside which contains no land. The BHT of a Minefield in a strait hexside is "14". A strait hexside is any hexside that has two separate land areas in it (two land areas that are not connected within the hex). The BHT of a Port Minefield is "15". The number of attacking factors is the number of Mine Factors present.

4. Hits suffered by a Minefield attack must be distributed among ships in the TF, one per ship in the following manner. Each DD, each AP, each PG, each CL, each AO, any other ship type/s. If the total number of hits exceeds the number of ships in the TF, ships take extra hits in the same order.

5. Each TF that enters a Minefield is attacked by the Minefield separately.

6. If a TF is attacked by aircraft while in a friendly Minefield, the BHT is increased by one table (+1). If a TF is attacked by enemy ships while in a friendly Minefield, the TF must accept an attack by the Minefield.

7. A TF in an enemy Minefield undergoes a Minefield attack before any combat.

MINEFIELD DETECTION

1. Ships may search a suspected hex for mines by simply declaring this when moving on the mapboard. If such a hex contains a Minefield, it is found. Coastwatchers can never find enemy Minefields.

2. When a player finds a Minefield, he is told only that a Minefield exists in the hex. He is not told in which hexside the Minefield exists, nor how many Mine Factors are in the Minefield.

MINESWEEPING

Minefields may be swept two ways. The first requires the use of Minesweepers (MSs). The second method may be used if the Minefield is a Port Minefield.

1. Only Minefields that have been found may be swept.

2. To sweep a non-Port Minefield, a TF must contain only MSs. The TF must cross the Minefield hexside. In doing so the TF is attacked by the Minefield with a BHT of "9". For each MS that survives, the number of Mine Factors in the Minefield is reduced by one. *Note that the sweeping player will not know which hexside contains the Minefield, and may run his minesweepers through the hex several times before commencing sweeping!*

3. To sweep a Port Minefield, a player may roll a die each turn. On a roll of '1-4', there is no effect. On a roll of '5', the Minefield is reduced by one Mine Factor. On a roll of '6', the Minefield is reduced by two Mine Factors. This procedure represents the efforts of small boats available at most bases. A player may add one (+1) to the die roll for any base that is a Depot, a Seaplane base, or a PT base.

4. MSs may escort TFs through a Minefield that has not been swept and the other TFs undergo a Minefield attack with the BHT reduced by three tables (-3).

VICTORY POINTS

1. Each Mine Factor planted more than six hexes from a friendly base—1 Point.

2. Each Mine Factor planted in a hex with an enemy base—3 Points.

3. Each swept Mine Factor—1 Point.

II. SUBMARINES

INTRODUCTION

Submarines were streamlined extensively for playability. This section of the article is for those admirals with a sincere interest in submarines (just like Admiral Nimitz), which should satisfy the supporters of the Silent Service.

DEPTH

Submarines may be at one of three depths: Surface, Periscope, or Deep.

1. A sub may change from one depth to any other depth each turn.

2. If a submarine is at surface depth and is attacked by an Air Formation or a TF, the submarine may attempt to dive to periscope depth to escape the attack in the following manner. The BHT is established and the player with the submarine must then roll that number or lower to be able to dive. A sub-

marine that dives may only be attacked at periscope depth. If a submarine chooses not to dive or is unsuccessful in the diving attempt, it is attacked at surface depth and the BHT for the attack is increased by two tables (+2).

3. If a submarine is at periscope depth, it is attacked normally but cannot use its AAF.

4. Submarines at surface depth or periscope depth can observe and be observed.

5. A submarine at deep depth cannot be attacked. A submarine at deep depth cannot be observed, cannot observe anything, and can move one hex only every even turn. A submarine at deep depth may not enter a partial-land hex.

6. A SS type submarine at surface depth can move a second hex every third turn, providing it has been at surface depth for the two previous turns and remains at surface depth on the turn it moves two hexes.

SUBMARINE TYPES

There were three specific types of submarines (SST, SS, and SSM) that participated in the time span of *FLAT TOP*. These are described below for historical interest.

1. JAPANESE.

a. (SST) R0-Type. These were small coastal vessels that are identical to our S-Boats.

b. (SS) I-Type. These are the submarines represented in the game.

c. (SSM) I-Type Minelayers. These are monster subs of 1200+ tons displacement. This class planted mines or operated floatplanes.

2. UNITED STATES.

a. (SST) S-Boats. These small subs were entirely unsuited to combat anywhere, especially the South Pacific.

b. (SS) Gato Type. These are the submarines represented in the game.

c. (SSM) *Nautilis* and *Argonaut*. These were U.S. submarines of very large size. They were used as troop transports although the *Argonaut* was built as a minelayer.

3. SSMs have two loads of torpedoes and have an Ammunition Factor of 12 (they may also rescue one survivor factor). SSTs have one load of torpedoes. SSs have two loads of torpedoes.

4. The Japanese SSM with the floatplane (one Pete, for game purposes) must be at surface depth and spend three hours to launch or retrieve the plane. When launching, the Japanese player rolls a die to see if the plane can fly. If the roll is a '1', the Pete is unserviceable for the duration of the scenario (no victory points are awarded). If the roll is a '2', the plane must roll again next turn. If the roll is a '3-6', it may take off. The plane may only fly once per 12 hours. The plane may not participate in any combat or be placed in an Air Formation with any other planes. The plane has a MF of "4" and a RF of "4". This SSM is worth twelve Victory Points.

OPERATION AREAS

Submariners had a morbid fear of aircraft, especially floatplanes. The large number of aircraft and patrol vessels around bases resulted in some operational restrictions.

1. Submarines may not surface during the day within five hexes of an enemy base.

2. Submarines are not allowed within three hexes of an enemy base at any time.

3. Pete and Dave floatplanes may attack submarines with a BHT of 1. The planes were used in this capacity and their numbers around the Bougainville area were deleted for playability. Rabaul and Shortland should have one special Air Formation (of Petes or Daves) assigned to them; do not use any plane counters, only an Air Formation counter. If destroyed, these Air Formations are replaced one hour after destruction by a new unit in the Just Landed Box of the appropriate Base. These Air Formations do not count towards replacements. Each is worth one Victory Point.

4. MS units are treated like PG units for the purposes of attacking submarines.

COMBAT

One of the biggest problems with the submarine system is combat resolution. To help relieve this imbalance, whenever a player has a submarine that is about to be attacked by a TF, he must first roll one die and consult the *Submarine Attack Table*. If more than one TF is present, he must roll for each TF.

SUBMARINE ATTACK TABLE

Die Result

1. The TF may attack by may not be attacked by the submarine.
2. The attack is resolved normally.
3. The attack is resolved normally.
4. The submarine may attack first and then the TF may attack.
5. The submarine may attack first and then the TF may attack.
6. The submarine may attack but may not be attacked by the TF.

Modifers:

a. +1 if it is a night turn
b. +1 if in a storm
c. +1 if the TF is in a Minefield
d. +2 if the TF is anchored
e. -1 if the submarine is a SSM or SST
f. -1 if there is an enemy Air Formation in the hex
g. -1 if the TF has been attacked within the last 12 hours by submarines

III. PT BOATS

INTRODUCTION

PT-Boats (PTs) of this period were armed with two or four WWI torpedo tubes, and a varied selection of .30 and .50 caliber machine guns. Those PTs with two torpedo tubes had four small depth charges that were totally useless. PTs were capable of speeds up to 35 knots when in good shape. For the purposes of this article PTs are two per counter. PTs are treated like any other ship except as follows.

MOVEMENT

PT's have a very short action radius.

1. PTs are treated like aircraft for purposes of movement. They require a log column and a TF box. These may be made from unused groups or from a separate sheet of paper with a corresponding counter. They have a Range Factor of "12".

2. After expending their one attack, PTs must rearm using the Optional Rearming rule. PTs have the option of readying in three hours but may only do so without torpedoes.

3. Due to the severe problems with servicing, each PT must, after reloading, roll a die. On a roll of '1-4', the PT may operate normally. On a roll of '5-6', the PT must start rearming over again. Each time the PT starts the rearming process it may choose the three or six hour reloading option.

4. PTs are immune to all Torpedo attacks and all Minefields. Aircraft attacking PTs have their BHT reduced by two tables (-2). Due to their small size and muffled engines, whenever a player has a PT that is about to be attacked by a TF, he must first roll one die and consult the PT Attack Table. If more than one TF is present, he must roll for each TF.

PT ATTACK TABLE

Die Result

1. The TF may attack but may not be attacked by the PT.
2. The TF may attack first and then the PT may attack.
3. The attack is resolved normally.
4. The PT may attack first and then the TF may attack.
5. The PT may attack first and then the TF may attack.
6. The PT may attack but may not be attacked by the TF.

Modifers:

a. +1 if it is a night turn
b. +1 if in a storm
c. +1 if the TF is in a Minefield
d. +2 if the TF is anchored
e. -1 if there is an enemy Air Formation in the hex

5. The BHT used is 7 for the PT and 11 for the TF if the TF attacks first. The BHT used is 11 for the PT and 9 for the TF if the PT attacks first. If it is a night turn, subtract three tables (-3) from these BHTs.

SCENARIO TABLE

Coral Sea

1. Allied.

a. Port Moresby has a Minefield with eight Mine Factors.

b. Port Moresby is a Depot with two Mine Factors available.

c. Allied submarines are 5SST.

2. Japanese.

a. Rabaul has a Minefield with three Mine Factors.

b. Rabaul is a Depot with two Mine Factors available.

c. Change the 4PG that begin the game at Rabaul to 1ML and 3MS.

d. Change the 4PG that begin the game at Tulagi to 2ML and 2MS.

e. Japanese submarines are 2SST and 5SS.

Eastern Solomons

1. Allied.

a. Espiritu Santo has a Minefield with three Mine Factors.

b. Port Moresby has a Minefield with nine Mine Factors.

c. Espiritu Santo is a Depot with six Mine Factors available.

d. Delete 2DD from the Order Of Battle.

e. Add 3DM to the Order Of Battle which must start at Espiritu Santo.

f. Add 2MS and 2PT to the Order Of Battle which must start at Tulagi.

g. Tulagi is a special non-plane base. It takes four hits to knock it out and has an AAF of 1.

h. Allied submarines are 1SSM and 6SS.

2. Japanese.

a. Rabaul has a Minefield with four Mine Factors.

b. Rabaul is a Depot with three Mine Factors available.

c. Add 1DM, 2MS to the Order Of Battle which must start at Rabaul.

d. Japanese submarines are 1SST, 2SSM, and 10SS.

Santa Cruz

1. Allied.

a. Espiritu Santo has a Minefield with five Mine Factors.

b. Espiritu Santo is a Depot with six Mine Factors available.

c. Port Moresby has a Minefield with ten Mine Factors.

d. Delete 2DD from the Order Of Battle.

e Add 2DM, 2MS, and 4PT to the Order Of Battle which must start at Tulagi.

f. Tulagi is a special non-plane base. It take six hits to knock it out and has an AAF of 3.

g. Allied submarines are 1SSM, 11SS.

2. Japanese.

a. Rabaul has a Minefield with four Mine Factors.

b. Rabaul is a Depot with three Mine Factors available.

c. Add 1DM and 2MS to the Order Of Battle which must start at Rabaul.

d. Japanese submarines are 12SS.

Guadalcanal

1. Allied.

a. Espiritu Santo has a Minefield with five Mine Factors.

b. Espiritu Santo is a Depot with eight Mine Factors available.

c. Port Moresby has a Minefield with ten Mine Factors.

d. Add 1MS to the Order Of Battle which must start at Espiritu Santo.

e. Add 2DM, 1MS, and 9PT to the Order Of Battle which must start at Tulagi.

f. Tulagi is a special non-plane base. It takes six hits to knock it out and has an AAF of 3. Tulagi can become a Depot if Mine Factors are brought to it during the game.

g. Allied submarines are 1SSM and 12SS.

2. Japanese.

a. Rabaul has a Minefield with five Mine Factors.

b. Rabaul is a Depot with three Mine Factors available.

c. Add 2DM and 2MS to the Order Of Battle which must start at Rabaul.

d. Japanese submarines are 2SSM (one with one Pete plane; this SSM cannot carry Mine Factors), 1SST, and 10SS.

THE COUNTERS

Players will have to make DM, MS, ML, SSM, and SST counters themselves from blank counters. Here are these ship's specifics. The Torpedoes specification means how many loads the ship/submarine has; a ship with '2' has its initial load plus one reload.

1. Allied.

a. DM: Gunnery Factor—1, AAF—1, MF—2, Damage Factor—2, Mine Factors—2, Torpedoes—0, Victory Points—10.

b. MS: Gunnery Factor—0, AAF—1, MF—1, Damage Factor—1, Mine Factors—0, Torpedoes—0, Victory Points—6.

c. PT: Gunnery Factor—0, AAF—1, MF—2, Damage Factor—1, Mine Factors—0, Torpedoes—1, Victory Points—4.

d. SSM: Gunnery Factor—1, AAF—1, MF—1, Damage Factor—1, Mine Factors—2, Torpedoes—2, Victory Points—10.

Continued on Page 33, Column 2

SCENARIO SEVEN

"WAKE ISLAND"

By Don Gilman

Historically, the CV *Saratoga*, with support from the CVs *Enterprise* and *Lexington*, were assigned to relieve Wake Island after the first Japanese bid to take the island failed.

One reason the carriers never reached the island before the second successful invasion was the change of command in progress at Pearl Harbor; Admiral Kimmel had been recalled to Washington to explain the Pearl Harbor attack and his subordinate, Admiral Pye, was concerned with the safety of the carriers. Naval Intelligence had no idea of where the Japanese carriers were, and people still honestly believed that an invasion of Hawaii might take place.

This scenario assumes that either Admiral Kimmel remained at Pearl for another two weeks, or Admiral Nimitz, then in Washington, arrived one week earlier.

This scenario uses a *D-DAY* blank hex sheet (available from Avalon Hill for $1.50 each, or 4 for $5.00). The illustration is a reduced version of this size hex sheet and shows the Map Sectors, Directional hexes, off-board entry hexes, and the Wake Island base.

"Wake Island"

Time: 0100 21 December—2400 23 December (76 turns)
Weather: Scattered Clouds

Allied Order Of Battle

Ships: CV Enterprise, CV Lexington, CV Saratoga, CA Astoria, CA Chicago, CA Indianapolis, CA Minneapolis, CA New Orleans, CA Northampton, CA Portland, CA Salt Lake City, CA San Francisco, 25DD, 1APD, 2AO, 6SS, 1SSM (no Mine Factors)

Sea Based Air: 12 Dauntless, 4 Devastator, 11 Wildcat, 6 Buffalo

Bases: Wake Island, Hawaii, Midway

Land Based Air:
At Wake Island: 1 Wildcat
At Hawaii or Midway: 2 B-17, 2 Catalina

Ships Starting Positions: CV Saratoga, CA Astoria, CA Minneapolis, CA San Francisco, 8DD, 1APD, and 1AO must begin in any of hexes YY10-YY20. CV Lexington, CA Chicago, CA Indianapolis, CA Portland, 8DD, and 1AO enter on any turn 0500-1200 on 21 December in any of hexes YY25-YY36. CV Enterprise, CA New Orleans, CA Northampton, CA Salt Lake City, and 9DD enter on any turn 1800-2400 on 21 December in any of hexes YY10-YY20.

Japanese Order Of Battle

Ships: CV Hiryu, CV Soryu, CAV Chikuma, CAV Tone, CA Aoba, CA Furutaka, CA Kako, CA Kinugasa, CL Tatsuta, CL Tenryu, CL Yubari, 14DD, 2APD, 3AP, 1PG, 2SS

Sea Based Air: 12 Kate, 12 Val, 12 Zero, 2 Jake

Base: Kwajalein

Land Based Air: 17 Nell, 5 Mavis

Ships Starting Positions: CV Hiryu, CV Soryu, CAV Chikuma, CAV Tone, and 2DD enter on any turn 0100-0500 in any of hexes A1-J1. All other ships enter on any turn 0300-0900 on 22 December in any of hexes A35-N35.

Special Rules

1. Allied CVs have radar.
2. The Japanese and Allied APs may unload only in the Wake Island hex.
3. CVs Hiryu and Soryu must be within ten hexes of the western edge of the mapboard at the end of the game.
4. The Wildcats have a BHT of 7 for Air to Air Combat.
5. The six Buffalo available must be placed on CV Saratoga. Once launched, they may not land on a CV; they must land at Wake Island or an off-board base. They may ready and launch from a base normally.
6. OPTIONAL RULE. CV Saratoga and accompanying ships must begin fueling by 0900 23 December. CV Lexington and accompanying ships must begin fueling by 1200 23 December.

Special Victory Conditions

1. Automatic Victory Level: 200 Points
2. The Japanese player must unload 50 Points more than the Allied player in the Wake Island hex or the Allied player wins.

Base Information

Kwajalein
MC—infinite; LF—infinite; RF—5LP, 4SP; PH—LP, SP

Wake
MC—9; LF—4/2LP 2/1SP; RF—3LP 1SP; AAF—5; SF—8; PH—LP, SP

Midway
MC—30; LF—12/4; RF—8; PH—LP, SP

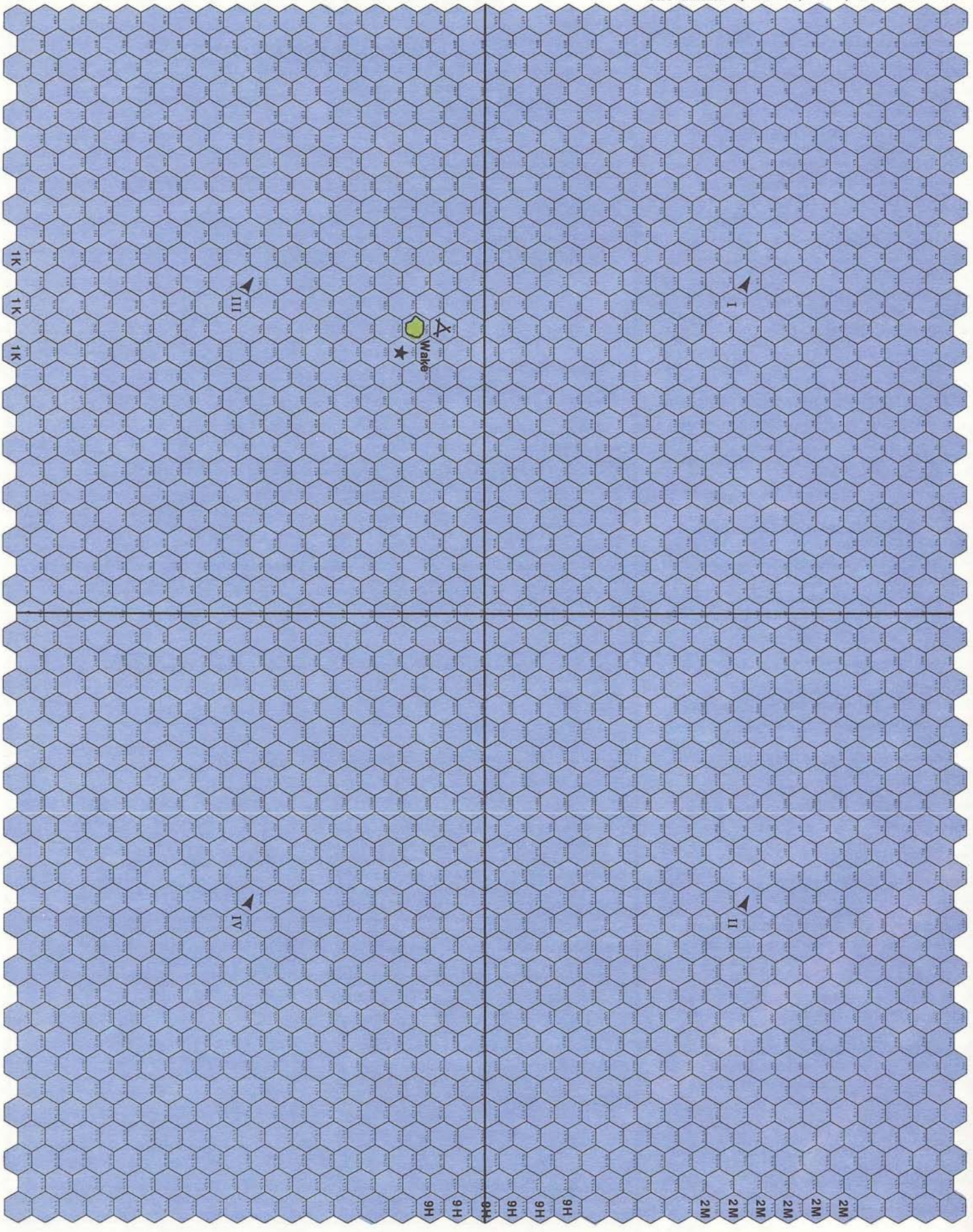
Hawaii
MC—infinite; LF—infinite; RF—infinite; PH—LP, SP;

Counter Information

Specifications for all the counters used in this scenario can be found in *FLAT TOP*, the article entitled "MIDWAY" in this issue, and the article entitled "MORE OPTIONS" in this issue.

FLAT TOP WAKE ISLAND VARIANT MAP.

The GENERAL, Vol. 18, No. 6, 1982 T.A.H.G.C.



BRITISH FLAT TOPS IN THE SOLOMONS

By Bob Collman

Although the aircraft carrier was the most important capital ship in World War II there were relatively few carrier versus carrier battles. Attrition of aircraft and pilots was high, and the Japanese rapidly lost their small group of superb pilots with which they had begun the war. Four major carrier actions in 1942 exhausted the Japanese air groups and forced them to keep their CVs in reserve until 1944. Their final immolation came at the Battle of the Philippine Sea, aptly called "The Marianas Turkey Shoot".

Gamers interested in *FLAT TOP* will soon realize they have in the scenarios of the game the three most balanced of the historical carrier versus carrier battles. Any real enthusiast is, however, unlikely to be satisfied with such a condition and the following suggestions will not only help create original scenarios but hopefully throw new light on the existing scenarios and increase insight into carrier tactics.

FLAT TOP does much to point out the difference between American and Japanese equipment and tactics. It is easy to dwell on these differences and overlook the fact that in basic design, equipment, and tactical goals they were more similar than different. American and Japanese aircraft carriers were basically large cruisers with a flat deck for landing aircraft. American carriers had light armor protecting machinery and magazines but no protection for aircraft or hangars. Japanese carriers were even less protected in most cases. In contrast, the British Illustrious class aircraft carriers were designed to operate within range of enemy land based aircraft and thus had armored flight decks and hangars. They could withstand direct hits by 500 lb bombs on their flight decks; in fact, *Illustrious* took six 1,000 lb bomb hits from Stukas and managed to steam away at 18 knots. This protection was not gained without penalties. The extra topweight of the armored flight deck and hangar sides allowed for only one hangar and reduced aircraft capacity. Only two small elevators were provided in order to maintain the structural integrity of the flight deck, and plane handling was relatively primative with the spotting of aircraft done manually until late in the war.

The relative merits and disadvantages of the armored flight deck have long been a topic of debate among carrier fans. Illustrious class carriers served with distinction in the Arctic, the Mediterranean and the Far East. Despite this, they never participated in a carrier versus carrier duel with the enemy. Heavily outnumbered in the Indian Ocean early in the war, Admiral Somerville, with *Indomitable* and *Formidable* as part of his force, wisely chose not to engage the Japanese carriers during daylight and did not get the opportunity at night. Thus, there can never be any truely historical scenarios in which *Victorious* meets *Shokaku* and the possible result of such a meeting remains a topic merely for theoretical discussions.

FLAT TOP is a game of sufficient detail to allow players (especially in refereed games) to get the feel of carrier versus carrier combat. The rules are clear and concise but still sufficiently open-ended to allow gamers to experiment with new or unusual tactics, often with results that justify the acts of the historical commanders. The game is sufficiently accurate to be used as a method of gaining insight into carrier operations. By fitting British task forces and aircraft into the system and substituting them for Americans, the discussion of the armored flight deck can be given simulated fact to add to theory. This may be interesting, but is it historical nonsense?

If, as was quite possible, the *Lexington*, *Saratoga*, and *Enterprise* were at Pearl Harbor when the Japanese struck, it is reasonable to assume the US would have immediately turned to Britain for temporary help, as they did when they obtained the loan of *Victorious* later in the war. Britain had at least as much to lose as the US if Australia had been isolated. It is conceivable that President Roosevelt would have dealt directly with Winston Churchill to bargain for the loan of three or four British carriers. The US could have agreed to take complete responsibility for escorting the Arctic convoys to Russia, thereby freeing British ships for other activities. In addition, British naval aircraft were obsolescent and a promise of a higher percentage of future American naval aircraft production might have been the final bargaining point. For purposes of the scenarios we will assume the British agreed to temporarily loan the Americans the use of *Illustrious*, *Victorious*, *Formidable*, and *Indomitable*.

The British navy in 1942 was not without its assets. The Illustrious class carriers had strong anti-aircraft protection and most of the British cruisers had eight or nine 20mm Oerlikons added in the spring of 1942 to make up some of their deficiencies in AA effectiveness. The King George V class battleships had improvements to their anti-aircraft protection as a result of the earlier loss of the *Prince of Wales* to Japanese aircraft. The Dido class light cruisers were similar to the US Atlanta class, designed primarily as AA escorts. The destroyers varied considerably between classes in their merits as AA screening ships.

TABLE A

Ship	MC	LF	RF	PH	AAF	Radar	Normal Airgroup
Illustrious	20	10/3	6	CV	6	Yes	16
Victorious	20	10/3	6	CV	6	Yes	16
Indomitable	20	10/3	7	CV	7	Yes	18

TABLE B

Aircraft	N	MF	RF	Type	Air Modifier	Anti-Sub
Albacore	AL	5	10	CV	+2	1
Fulmar	F	7	7	CV	+1	—
Seafire	SF	10	4	CV	-1	—
Sea Hurricane	SH	8	5	CV	-1	—
Swordfish	SW	4	8	CV	+2	1
Martlet	MA	8	6	CV	0	—

All of the British cruisers had torpedo tubes and the torpedoes were sound. Crews were specifically trained in night combat, gunnery was of a generally high standard, and damage control in most British ships was not neglected as it was by the Japanese.

Britain had a two year head start on the Americans in the installation of radar on their warships. By 1942 most British ships sported a variety of radars; air search, surface search, range finging, and fire control. The sets were generally superior to US equipment at that time, the operators were practiced, and techniques were sound. Fighter direction was excellent and the US navy adopted the system in 1943 after operating with H.M.S. *Victorious*.

British destroyers and their crews had considerable experience against enemy submarines. The battle of the Atlantic and the war in the Mediterranean gave the British considerable expertise in anti-submarine warfare.

The largest weakness of the British navy at this time, at least in the context of carrier task forces, was the poor quality of the aircraft of the Fleet Air Arm. Most of the planes appear to have been more suitable for the Ark than the *Ark Royal*.

A glance at the British Aircraft specifications clearly points out their disadvantages in most areas. This resulted from the Fleet Air Arm being controlled by the RAF until 1937. Not only did the Air Ministry fail to understand the requirements for effective naval aircraft but were fully committed to high-level bombing and failed to keep up with dive bomber design. The Fleet Air Arm itself was also capable of making mistakes and insisted that naval fighters have two man crews, one a navigator. Generally there was little expectation for high performance in naval aircraft of any type.

The Swordfish was known lovingly as the Stringbag. These viceless but archaic biplanes served throughout the war, first as torpedo bombers and eventually as subkillers. They were too slow and vulnerable for daylight torpedo attacks and were therefore equipped with ASV (Air to Surface Vessel) radar and the pilots were trained for night carrier operations and attacks. A night attack on the *Bismarck* in poor weather was made possible by radar and their night attack on the Italian Fleet in Taranto was sufficiently successful for the Japanese to study it in detail while planning their attack on Pearl Harbor.

The Albacore was supposedly a replacement for the Swordfish but only a marginal advance. Also biplanes, they were slightly faster, possessed a better range, and had an enclosed cockpit and a windscreen wiper. It seems incredible that first service deliveries of this antique occured in March 1940. They were also equipped with ASV radar and were at the peak of their career as a night torpedo bomber in 1942. The British torpedo was not equal to the Japanese Long Lance, but was generally reliable and considerably better than the American Mark XIII; at least it could normally be expected to explode.

The desperation of the pilots of the Fleet Air Arm can be judged by the enthusiasm with which they accepted the first deliveries of the Fulmar in June 1940. These were two-seater naval fighters of few vices, ample firepower, and moderate performance. However, they lacked speed, being unable to catch a JU88, and couldn't stay in the air with an Me 109 even if they had been able to catch one. Fortunately, much of their career was spent in the Mediterranean where their eight machine guns were more than adequate to dispatch the nimble Italian fighters in one burst, which was all they usually got.

The desperate need for a high performance fighter resulted in the fitting of Hurricanes with tail hooks and calling them Sea Hurricanes. They had few of the usual attributes of naval fighters. Their wings wouldn't fold, they were short on range, difficult to land on a deck, and had the ditching characteristics of a submarine. Fortunately, they were tough in a fight, could take punishment, and were available.

All of the comments made about the Sea Hurricanes apply to the Seafire. A two hour useful endurance did not endear them to carrier skippers, who were constantly having to turn into the wind. They also tended to break up under the stress of carrier landings and more Seafires were lost due to landing accidents (prangs) than enemy action. It has been suggested that British carriers needed armored flight decks to protect them from crashing Seafires. Despite this they were vicious in air combat and could outgun, outrun, outclimb, and outdive a Zero. They could also turn inside a Zero at high speed. This fighter was not available in the Far East until September 1942.

Martlets are Wildcats that were sold to the British.

The following special rules should allow British ships and aircraft to be substituted for their American counterparts and give a realistic result, not necessarily a balanced one. You can judge for yourself the relative merits of a different approach. The Fulmars were used for search in daylight, CAP and strike escort. The Swordfish and Albacores were used for search, anti-submarine patrol, dive bombing, and torpedo attacks, usually at night. Sea Hurricanes and Seafires lacked the range for most offensive actions and were usually used for CAP. The British player will have to assess his strengths and weaknesses and use different tactics than either the American or Japanese player. It's a new game.

The following rules recreate the effects of bombs and gunfire on the armored flightdecks of the British carriers and apply only to these ships.

1. No Air Factor losses occur to aircraft in Readying boxes. They are considered to be in armored hangars.

2. Losses to aircraft in the Just Landed section are 1 Air Factor for each hit.

3. Air factors in the Readied section lose 2 Air Factors for each hit.

4. A carrier's AAF is reduced by 2 per hit if there are planes in the Ready box.

5. The Critical Hit Table is consulted only on a die roll of "4". When rolling on the Critical Hit Table subtract one from the die roll and treat a "0" as no effect.

6. Bombs do not count as hits on the carrier itself and will not sink it. (The Japanese were using 500 lb bombs.)

7. Gunnery Combat does half damage to a British carrier, rounding up.

The following rules apply only to British ships and aircraft.

1. All British CVs, BBs, CAs and CLs have radar.

2. Swordfish and Albacores have ASV (Air to Surface Vessel) radar. These aircraft may subtract one when rolling on the Search Table. These planes may also observe TFs at a distance of three hexes; the Condition Number is 1.

3. Seafires must use the Night Landing Chart each time they land to represent landing accidents, but can add three to the die roll.

4. The Japanese receive a +1 Anti-Aircraft fire modifier against Albacore and Swordfish.

5. Albacore and Swordfish have only a modifier of -1 when making an attack at night.

6. Albacores and Swordfishes make night landings without consulting the Night Landing Chart.

7. To reflect the excellent British fighter control, British interceptors add two when they use the Interception Table while attacking within 2 hexes of a British CV.

Continued on Page 33, Column 3

TABLE C

British Plane Name	Air to Air	Air Attacks Vs Bases: Level Bombing High Altitude GP	Air Attacks Vs Bases: Level Bombing High Altitude AP	Air Attacks Vs Bases: Dive Bombing GP	Air Attacks Vs Bases: Dive Bombing AP	Air Attacks Vs Ships: Level Bombing High Altitude GP	Air Attacks Vs Ships: Level Bombing High Altitude AP	Air Attacks Vs Ships: Level Bombing High Altitude GP	Air Attacks Vs Ships: Level Bombing High Altitude AP	Air Attacks Vs Ships: Dive Bombing GP	Air Attacks Vs Ships: Dive Bombing AP	Torpedo Bombing
Albacore	1	3	1	5	1	—	—	—	—	1	5	—	—	8
Fulmer	6	—	—	4	—	—	—	—	—	1	—	—	—	—
Seafire	10	—	—	3	—	—	—	—	—	1	—	—	—	—
Sea Hurricane	9	—	—	4	—	—	—	—	—	1	—	—	—	—
Swordfish	1	3	1	5	1	—	—	—	—	1	5	—	—	8
Martlet	9	—	—	4	—	—	—	—	—	1	—	—	—	—

THE BRITISH FLEET IN VICTORY IN THE PACIFIC

By Jim Davis

It is not very often that the designer/developer of a game finds the time to respond to much of the material on his labor printed in these pages. And never, in my brief memory, has one responded with such alacrity as Richard Hamblen to Mr. Davis's views. All in all, it makes the following most interesting reading.

Early in the career of *VITP,* it was acknowledged that the Japanese have a definite edge in play, and various optional rules have been suggested in an attempt to redress the balance. However, to my knowledge no one has suggested the reintroduction of an element that was left out of the game specifically because it provides too much of an offensive threat for the Allies late in the game—namely, the British East Indies Fleet.

Until recently, I never questioned the impotence of the British fleet in *VITP.* If that was the way it was (as we all supposed it was since the other historical aspects of the game are accurate), so be it. After all, most of us have seen the pictures of *Cornwall, Dorsetshire,* and *Hermes* doing their submarine imitations. However, I can also remember seeing other pictures—pictures of modern carriers with British markings launching waves of Corsairs and Avengers, also with British roundels, to raid the enemy oilfields and airfields in Indonesia. Some time spent at the local library revealed that such pictures exist indeed. Commencing early in 1944, the British East Indies Fleet conducted many powerful and successful carrier raids into Indonesia; Prime Minister Churchill continually lobbied in favor of a campaign of amphibious invasions across Malaysia and Indonesia, to be conducted in the latter half of 1944. However, *VITP* does not provide even the remotest possibility for the occurence of such carrier raids (no British carriers being available after turn 6 except the antiquated *Hermes*), much less any sort of amphibious operations whatsoever. Well, why not?

The answer, of course, is to be found in Richard Hamblen's designer's article on *VITP* in Vol. 14, No. 4. On the subject of the British, he said: ". . . since British policy was not to make any long-term move into the Pacific until Germany was defeated, some way had to be devised to prevent the British from taking the strategic offensive . . . From turn 6 on . . . every British ship becomes an offensive threat—at exactly the time that the British were deciding to confine their counterattacks to the Indian Ocean. To simulate this in the game, ship arrivals during this offensive period are simply left out of the game . . ."

Left out of the game! In a game so full of "what-might-have-beens", why leave out so many ships just because what they did historically turned out to be of little strategic value? For instance, look at the five Allied ships that start the game in Indonesia; what did they ever do historically to merit inclusion? There was never the slightest possibility that the Japanese could carry out their plan (actually given serious consideration) to capture Australia; but how many times has exactly that happened in your games of *VITP*? In a similar vein, even though the British never got the opportunity to carry out all their offensive planning, there must be a better way of simulating the potential and the difficulties of such than to simply leave the British ships out of the game.

Secondly, I think Mr. Hamblen has misinterpreted "British policy" in regards to the Royal Navy in Indonesia. True, the Far East was third on the Admiralty's list of important theaters; but that doesn't mean it was ignored. During 1942 and 1943, they kept every ship that could possibly be spared in Ceylon—including, at one time, three of their four newest carriers, when carriers were so desperately needed in the Mediterranean. Then, when Italy surrendered in September 1943, the Far East moved ahead of the Mediterranean on the abovementioned Admiralty list; British ships departed for Ceylon in substantial numbers. The English started carrier raids into Indonesian waters in April 1944—raids which the U.S. Navy considered important enough to justify the loan of the *USS Saratoga* to the British for two months. By July, the British had three fleet carriers and four battleships with which to raid Japanese-held areas. And raid they did; between July 1944 and January 1945, they conducted seven carrier-based operations against harbors, oilfields, oil refineries and airfields in Indonesia. The elimination of the German surface fleet as an offensive threat by the autumn of 1944 released the majority of the Royal Navy capital ships for service in Asia. In addition, the British, led fervently by Churchill, wanted to launch a major amphibious assault against Sumatra to be known as "Operation Culverin", but the invasions of France in June and August 1944 depleted British resources and caused the repeated postponement of the operation; the American liberation of the Philippines in October finally made it unnecessary. Notice that Culverin was not cancelled because the Japanese "beefed up their Indonesia defenses" —what Mr. Hamblen refers to was actually the temporary retreat of a substantial Japanese force, *early* in 1944, to Singapore for refit and repair, which in turn caused the British, still dangerously weak at the time in the Far East, to hole up in the Indian Ocean for more training. This Japanese force had departed by April. And, in addition to the abovementioned plans, the British were very eager to join up with the American Pacific Fleet, for which purpose the British Pacific Fleet was created in November 1944; the Americans, however, withheld their final approval of this move until the following June—after the decisive battles had been won.

In light of these actions and plans, I feel totally justified in my argument that the Royal Navy's war effort is being seriously slighted in *VITP.* Not only was their official policy always offensive-oriented when possible, commencing in the spring of 1944 they *were* on the offensive—destroying a substantial percentage of Indonesia's petroleum-producing capacity as well as harbor facilities and a large number of enemy land-based aircraft. Surely this does not constitute cowering defensively in the Indian Ocean.

If the true offensive nature of Royal Navy operations in Indonesia was accepted and actual ship arrivals allowed in *VITP,* the British would receive two carriers and four battleships on turn 7, two more CVs on turn 8, and (if, like many, you play the 9-turn game) another CV and two modern BBs on turn 9. Such forces would definitely have an impact on the play on the western portion of the board, and might even help erase a little of that Japanese edge.

VACATION ITINERARIES

Before starting on my wholesale changes for the last three turns on the OB chart, I would like to make some suggestions about adjustments to the British arrivals and departures earlier in the game. (How to do so without appearing to imply my favorite wargame designer is a boob? Well, we all know what a fair and open-minded man he is. He welcomes good suggestions—I hope.)

First, the *Devonshire* was assigned to "Force H" and, as far as I can tell, she arrived in Ceylon on the same day as the rest of the force, including *Illustrious.* In any case, she did arrive at some point in April 1942, ready for immediate duty, and so should be available for turn 3.

Next are the turn 5 removals. *Resolution* and *Revenge* did not leave for home until the middle of September 1943, being assigned to the East Indies Fleet the entire tour of duty, and thus are available for more than half of turn 6. They were ordered to cover the invasion of Madagascar—but only for a couple of weeks—and even then were just two days from Ceylon. Therefore, following the pattern of other ship removals, these should be removed at the beginning of turn 7, not turn 5. Likewise, *Ramilles* and *Royal Sovereign* were pulled out in January 1944, so all four of the old "R" class leave together. Interesting to note is the fact that these were brought home to England not because they were needed but, being considered no longer battleworthy, to be retired. Therefore, be it suggested that if they have already been sunk in the game, it is *not* necessary to replace them with other British ships for removal. I might point out that the same fate would have been shared by *HMS Hermes* had she survived. Even in 1941 she was considered no asset in a battle, and would probably have been decommissioned along with the outdated BBs once replacements were available.

Scheduled to pull out before turn 5, as things stand now, are *Valiant* and *Warspite.* The former left in February 1943, was thus present for only a long month of turn 5, and should be removed at this time. However I question the removal of *Warspite* along with her. *Warspite* did not depart until late April 1943, which means that she was around for four of turn 5's five months; she should not, I believe, be removed until turn 6.

The last turn 5 removal should be *Illustrious.* She sailed a month before the *Valiant;* since *Formidable* and *Indomitable* left on turn 4, this leaves *Hermes* the sole executor of Royal Navy airpower in the game for the entirety of the fifth and sixth game turns. Actually, *Indomitable* should depart play even earlier than she does (having left for home during May 1942); but, it seems a bit pedantic —even to a nit-picker like me—to bring her in on turn 2, only to take her out on turn 3 while bringing on the *Illustrious.*

For turn 6, along with *Warspite,* remove *Devonshire,* but bring in *Suffolk* and *Sussex* to relieve them.

At last: turn 7. Remember, this turn covers the time period (January through April) when substantial naval forces were appearing in Ceylon, having been released from more pressing duties by the surrender of the Italian fleet and the gradual attrition of the German fleet. Their arrival allowed the four "R" class BBs (and, out of pity, let us say *Hermes* too) to be turned out to pasture. The new East

Indies Fleet consisted of *Illustrious,* accompanied by *Unicorn* (a maintenance carrier pressed into service as a front line unit, as which she performed quite well), escorted by *Renown, Queen Elizabeth, Valiant,* and the Free French *Richelieu.*

On turn 8, these are joined by *Victorious* and *Indomitable,* escorted by *London* and *Cumberland.* Finally, turn 9 brings in *Indefatigable,* an enlarged version of the earlier class of armored carriers, escorted by the modern battleships *Howe* and *King George V.*

This reintroduction of ships already brought into the game once and later removed presents an interesting problem. Suppose the ships were sunk in their first incarnations—should similar substitutes be brought into play in their place? My thoughts are that such should not; the reasoning is that these ships were being dispatched to the Far East as rapidly as the European situation allowed. The Admiralty chose one modern battleship *(Duke of York)* and one modern carrier *(Formidable)* to remain with the Home Fleet and, in effect, ordered everything else to press toward Ceylon as fast as they could complete their present assignments and be made ready to sail. For this reason, I think that if a scheduled arrival has already been sunk in the game, it should *not* be replaced with a similar ship counter. The hypothetical second ship—the proposed substitute—was probably already scheduled to reach Ceylon as soon as feasible anyway, and simply would not have been able to arrive any sooner than it does. Thus, take care of those ships during their first appearance.

VARIANT RULES

Attack Bonus for British Air

Early in the game, British CVs don't receive the attack bonus for their airstrike factors, since both aircraft and crew training were inferior. However, by early 1944 the CVs were equipped with American-made planes (mainly Corsairs and Avengers) or equivalent British planes (Seafires and Barracudas); the pilots had been trained by American instructors. Thus, British CVs arriving in the game on or after turn 7 have bonus airstrike factors.

The Australian Rover

Shropshire was actually sent to Australia, not Ceylon, as a replacement for the sunken *Canberra.* To reflect this in the game, if either Australian cruiser is sunk, one British cruiser may be converted to Australian command (i.e.: freed from docking limitations so that it may operate with the American fleet). This may not be done for more than one CA, however; had the Aussies continued to lose cruisers, the British Admiralty did not have unlimited replacements to spare.

The Saratoga Experiment

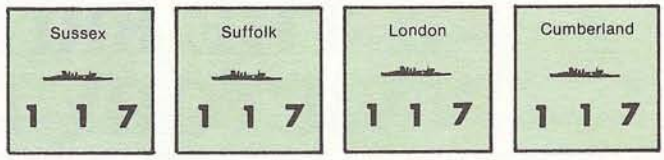
From mid-March through mid-May 1944, the *USS Saratoga* operated in the Indian Ocean and Indonesian waters with the British. To simulate this, at the end of turn 6 the Allied player is free to base one American carrier in Ceylon—if friendly, of course.

CONCLUSION

Admittedly, the addition this late in the game of a few ships that can't sail past Indonesia is not going to have a "knockout effect" on the enemy. However, when the American player is reduced to a half-dozen carriers and not many more battleships with which to control the entire board on turn 8, he may find himself very grateful that the British fleet can control Indonesia unaided. Some Japanese players may even be tempted to control the Bay of Bengal earlier in the game to prevent the arrival of the British reinforcements. In any case, play *VITP* with these changes; it may well be that you too come to appreciate the British impact on the Pacific war.

OUR DESIGNER REPLIES . . .

By Richard Hamblen



I'll start by explaining more precisely why the later British ships were left out of the game. The key problem is not whether the ships were present (indeed, if they were not present there would be no ships to "leave out"), but rather how they could be used. Essentially, the British had both the forces and intention to attack, but policy and logistics combined to confine them to the Indian Ocean until 1945—after the game ends. Since historically they were restricted to the Indian Ocean by factors outside the scope of the game, I left them out lest the Allied player use them improperly.

Mr. Davis raises many interesting points, but he exaggerates the aggressiveness of British policy both in intention and in the events. The British raids in 1944 were "hit and run" raids that avoided a major fight. In the game, such pinprick raids are invisible; *all* ships are assumed to be doing them off and on. These raids are represented by a shift in POC from Indonesia to the Bay of Bengal, since the Japanese could have stopped them only by controlling the Bay. "Patrolling" and "raiding" ships are doing something far different—they are looking for a fight.

The British were only mildly aggressive in 1944, for they did not want a major fight. Churchill sought an aggressive policy to enchance postwar British influence in the region, but his top military men were following the Allied policy of concentration against Germany in order to win the war most efficiently. By this time, the military men had blocked Churchill from control of the nation's military policy, so their views won out: avoid big battles in the Pacific until later, particularly since the Japanese were weakening as the Allies were growing stronger. The British were willing to attack in 1944, but not if it meant a major showdown.

Thus, British lack of aggressiveness was due not to the low priority placed on the Pacific theater, but rather it was simply against policy to provoke a major battle too soon. The British "kept every ship that could possibly be spared in Ceylon" only when they were defending in early 1942. After Midway they stripped the area and for nine months had *no* fleet carriers in the Far East. Even when the Admiralty sent ships for an offensive in early 1944, plans were limited to swift air raids. When they beefed up their forces later, they still waited for resources from Europe, delaying any offensive until after the game ends. The ships that were present, Churchill's desires and the Admiralty's plans for Sumatra do not matter; the problem was that policy and events in Europe, which we accept as given, kept the British in the Indian Ocean during the time covered by the game. So I am content with leaving out the later British ships as a simple way to recreate the situation.

On the other hand, Mr. Davis' suggestion to add these ships to the game has merit too. It gives us more ship counters to play with; it is interesting to see exactly when the ships actually did arrive and depart; it allows the British to interpret their historical policy with a little more flexibility; and, most importantly from the game's point of view, it allows the British to recover in those rare games where the Japanese send major strikes against them. So bring on the British—with a few additions to the rules.

The **EASTERN FLEET ORDER OF APPEARANCE** chart shows the new arrival and departure dates for all British ships. Other ships and units are not affected. Except where noted, the chart is Mr. Davis' thoughts organized. The notes include my own comments, and more detailed objections to some of Mr. Davis' suggestions in the article.

The **BRITISH RULES** module explains the new rules that should be added when using these British ships. These rules are self-explanatory.

BRITISH RULES

These rules give the British new abilities and restrictions that more accurately reflect their capabilities. The rules also straighten out some anomalies that are usually unimportant because the British fleet in the game is small, but which must be included now that the British will have a significant fleet at the end of the game.

1. NEW PORTS

1.1 The British restriction to Ceylon is murder when the Japanese attack the Bay of Bengal since the Japanese can air raid it. Add the following port and base to the game:

1.2 ADDU ATOLL

1.21 The British fleet had a secret island base named Addu Atoll in the wastes of the southern Indian Ocean. Add this green base to the map, in the Bay of Bengal.

1.22 Only British ships from the Bay of Bengal can return to base at Addu Atoll.

1.23 British ships in Addu Atoll cannot be air raided.

1.24 Addu Atoll cannot be invaded or captured.

1.3 MADAGASCAR

1.31 Add the red port Madagascar, off the map.

1.32 Only British ships can return to Madagascar.

1.33 Moving from Madagascar to Bay of Bengal counts as moving two sea areas; ships that can make this move must make a speed roll to do so.

1.34 Madagascar cannot be air raided nor captured.

2. BRITISH AIRPOWER

2.1 Mr. Davis suggests that all British carriers get the attack bonus on turn 7, but I offer an alternative. British airstrikes improved twice during the course of the war. In early 1944 the number of planes was increased dramatically, but these were still criticized severely for inefficiency in the air raids conducted in October 1944. As a result, the British spent the next two months refitting with superior planes and retraining to learn how to use them effectively. After that they do indeed merit the attack bonus.

2.2 Starting on turn 7, every British airstrike worth two points is increased to three points. Replace each carrier with the matching substitute counter provided in the insert. The *Hermes* and *Unicorn* are not affected.

2.3 Starting on turn 9, every British airstrike gets the attack bonus. The *Hermes* and *Unicorn* are affected.

3. DEPARTURE AND RETURN

3.1 Whenever a British ship is listed as leaving, the ship named must be removed from play. If the listed ship has been lost, the British must remove an exactly similar ship; if no such ship is available, the British can remove any single ship.

3.2 The **EASTERN FLEET ORDER OF APPEARANCE** chart indicates when each ship removed will reappear in the game. Place the ship counter next to the appropriate turn on the Allied Order of Appearance chart.

3.21 If no reappearance turn is listed for a ship, it will not return to play.

3.22 If a substitute ship is removed in place of the ship listed, the substitute ship must also reappear in place of it. (*Example:* If the *Illustrious* is removed in place of the *Indomitable* on turn 4, the *Illustrious* reappears in place of the *Indomitable* on turn 8.)

3.3 The removal of the *Illustrious* on turn 8 is an exception. It was removed from active service to undergo refitting—not because it was needed elsewhere. If it has been lost, no substitute ship need be removed. Of course, if nothing is removed then nothing reappears on turn 9.

4. DECOMMISSIONING

4.1 The "R" class battleships (4-4-3s) were decommissioned in late 1943 due to obsolescence, not because they were needed elsewhere.

4.2 Using Mr. Davis' suggestion, all four "R" class BBs are removed from play on turn 5. If an "R" class BB has been sunk, no substitute for it need be removed.

4.3 I would like to propose an alternative rule, based on the idea that the British would have left these ships in service if they had desperately needed them. My rule is: the British need remove only enough "R" class battleships to bring their total battleship losses up to six ships. (*Example:* If they have lost five battleships, they need remove only one "R" class BB on turn 5.)

4.4 Using either rule, only "R" class battleships need be removed.

4.5 Mr. Davis also suggests that the *Hermes* be decommissioned on turn 5, but I disagree. Carriers were too valuable; decommissioning a carrier is quite different than decommissioning an obsolete battleship (when even the newest battleships were obsolete).

5. BRITISH BASING

5.1 Treat the Free French *Richelieu* as a British ship.

5.2 If the *Canberra* is sunk, the British can "give" one cruiser (1-1-7) to Australia. This cruiser can then base in Australia or in Ceylon. The British can give only one cruiser to the Australians; should it be lost, they cannot give another.

5.3 Despite Mr. Davis' suggestion, the *Saratoga* cannot return to Ceylon on turn 6. It was actually based at Australia and rendezvoused with the British at sea. If the Japanese controlled the Indian Ocean or Australia, it is virtually certain that a ship as valuable as the *Saratoga* would not have been sent to an isolated Ceylon.

6. D-DAY

6.1 One reason that the British fleet stayed in the Indian Ocean was that its bases there were too far to allow it to maintain a presence in Indonesia. In mid-1944, the demands of the European theatre (i.e: the invasion of France) prevented it from receiving the amphibious capability needed to support a controlling fleet in Indonesia.

6.2 On turn 8, British patrolling ships leaving Ceylon or Addu Atoll automatically fail their speed rolls (and become raiders) if they try to enter Indonesia. *This rule applies only to British patrolling ships moving from Ceylon or Addu Atoll to Indonesia on turn 8.*

7. A NEW SURPRISE IN INDONESIA (This is my own little addition.—RH)

7.1 Change the initial surprise attack in Indonesia to one round of air raid, but allow the Japanese to add one to each die roll in this air raid (so an attack on the air unit would have a +1, and a shot with the attack bonus against a ship would have a +2 DRM).

7.2 The *Indomitable* was supposed to be the air escort for Force Z (the *Prince of Wales* and *Repulse*), but it ran aground off Jamaica and had to put in for repair in the United States. It was at the Cape of Good Hope, en route for Malaya, when the *Prince of Wales* and the *Repulse* went down. The Allied player rolls once on the chart shown, and the *Indomitable* is placed accordingly, just *before* the air raid in Indonesia begins:

Die Roll:	Starting Location:
1,2	Indonesia
3	Bay of Bengal
4,5,6	Turn 2 Reinforcement

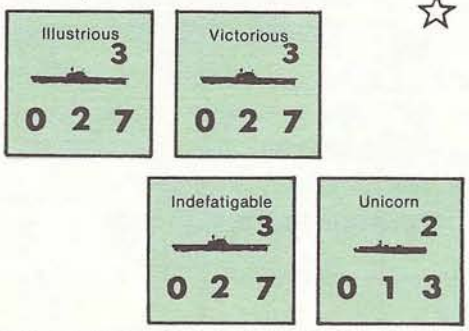
8 DO YOUR OWN RAIDS

8.1 Since we now have put the British air raids into the game, shift one Japanese POC from the Bay of Bengal to Indonesia. All other POC values remain the same.

8.2 The Japanese now get four POC for controlling Indonesia.

8.3 The Japanese now get only one POC for controlling Bay of Bengal.

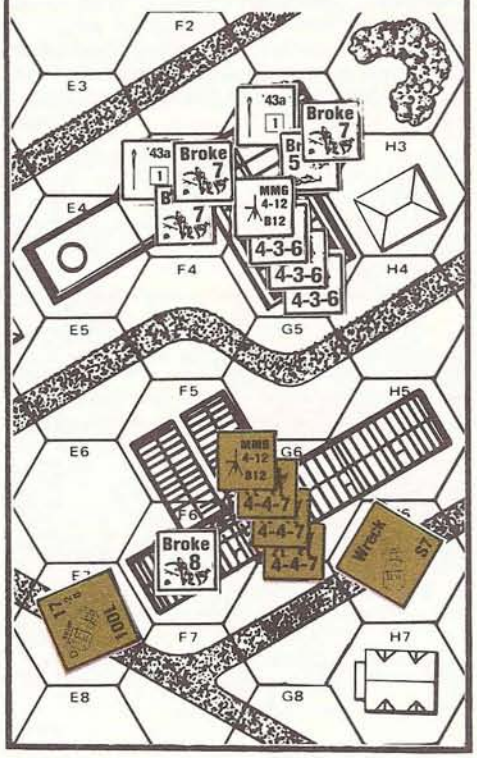
The reader will find the EASTERN FLEET ORDER OF APPEARANCE on the insert of this issue. Those who do not wish to deface their copy of the magazine may, instead of cutting the requisite additional counters pictured on these pages, find these in the countermix of WAR AT SEA and the WAR AT SEA VARIANT KIT (see ad elsewhere in this issue).



CONTEST NO. 106

It is the last turn of a *SQUAD LEADER* game, using all rules through Scenario 24 of *COD*. The German player began with two 8-0 leaders, three 4-6-7s, one 8-3-8, five 4-3-6s, two PF '43a and the MMG; the Russian started with two SU100s (value 169), nine 4-4-7s, one leader and the MMG. The only remaining forces are shown on the diagram. The German moved first—it is now his rally phase. The victory conditions center around control of building G4: the Russian must control it to win, while the German must control it *and* insure that no Russian unit has a LOS to the building. Assume every dice roll will be a "6", with the exception that each player may roll a "3" at his choice anytime during his own player turn. Can either player guarantee a win? Mark the result and show, step by step, the best possible German move followed by the best possible Soviet response.

The answer to this contest must be entered on the official entry form (or a facsimile) found in the insert of this issue. Ten winning entries will receive AH merchandise credits. In addition, each winner's name will appear on one of the leader counters to be released in *G.I.: ANVIL OF VICTORY*. To be valid, an entry must be received prior to the mailing of the next issue and include a numerical rating for this issue as a whole, as well as listing the three best articles. The solution to Contest #106 will appear in Vol. 19, No. 1 and the winners in Vol. 19, No. 2 of *THE GENERAL*.



PRE-EMPTION

NAVAL AVIATION TACTICS IN MIDWAY

By Captain Robert D. Harmon

MIDWAY is a dramatic game, as those who've played it can testify. Searches are tense; sudden, violent attacks threaten at any moment. Better than any later naval wargame, *MIDWAY* reflects the sudden turn of events in the battle, and the war. One five-minute attack, as did happen, sufficed to cripple the Japanese Navy. Indeed, this emphasizes the *MIDWAY* battle-board. Search-board strategy must be fulfilled on the battle-board, or not at all. A pre-emptive strike can destroy a carrier force in one game turn; failing this, the enemy has the same chance.

The first tactical imperative of MIDWAY, then, is to do unto others before they can do unto you.

The "Wargamer's Guide to *MIDWAY*" presents official rules changes; these pose new strategic problems. The Americans may leave the board, effectively escaping, after taking one air strike west of Midway. The first Japanese attack might be the only one. The Americans, for their part, need to strike early if they are to catch the enemy at their weakest. The Japanese Carrier Strike Force (CSF), with only four (effective) escorts for four carriers, is wide open for air attack. This "window of vulnerability" closes as the four Kumano class cruisers, and later the Invasion Force, join the CSF. American prospects for a successful attack diminish accordingly.

The second tactical imperative of MIDWAY: Maximize your first air strike, for it may effectively be your last.

This treatise will discuss Japanese attacks first. This deals with the "escape clause" problem, to make that first attack count.

Tactics can be summarized in simple arithmetic. The U.S. fleet, at most, can fire 11 times at attacking aircraft. The 11 American ships, under the Anvil rule, can be attacked from port, starboard, forward, and overhead; thus, 44 possible attacks against 11 defensive fires.

The Japanese player can take a literal approach to the 44-11 opportunity, seeking to overload the defense, not just "overwhelming" it as in the "MIDWAY Thesis" (Vol. 9, No. 4). The *Scattergun Attack,* to this end, is shown on Diagram 1 against a typical U.S. formation (the *Hourglass,* in this case).

The U.S. player should, of course, choose a defensive formation that provides flexibility, using interlocking fields of fire. Three formations affording this are the *Hourglass, Hex,* and *Column,* and are shown as the examples proceed.

A ruling in Vol. 17, No. 4 is critical to the *Scattergun Attack:*

Q. Can you make additional aircraft counters when you need the correct change during combat or any other time?

A. Yes.

The *Scattergun Attack,* as the name implies, spreads the Japanese 28D (divebomber factors) and 31T (torpedo bomber factors) throughout the U.S. fleet. The factors are assigned by target, as follows:

Each carrier:

	T2	
T1	D3	T1

Each five-hit ("heavier") cruiser:

	T1	
T1	D3	T1

Four-hit (heavy) cruisers:

	—	
T1	D2	T1

Light cruiser *Atlanta:*

	—	
T1	D2	T1

The need for extra counters should be obvious by now.

The *Scattergun Attack* has one manifest advantage, a mass of potential 1-1 and 2-1 attacks, far exceeding American defensive fire. The thin spread of torpedo bombers is a major disadvantage, as shall be seen. Further, selective fire against the divebombers and T2 groups could blunt the attack.

The *Scattergun Attack* is illustrated in Diagram 1, against the *Hourglass* formation. The course of battle, given a defense of U.S. carriers and heavier cruisers, is shown in Chart 1A. The Americans' tactics were to shoot the main air groups, seeking to save the bulk of carriers and escorts. Chart 1A shows how neither aim was achieved. This is an object lesson: Massed 1-1 attacks are deadly. Chart 1B shows the same attack, with the same forces and the same *Hourglass* formation. This time the Americans fired all 11 ships at the 12 groups over the carriers. Given a stark choice of saving carriers or escorts, the Americans saved the carriers.

The American defense is successful, in that the Americans can now:

1. Retaliate against the Carrier Strike Force,
2. Drop off surviving aircraft on Midway, while the ships
3. Leave the board.

This is *MIDWAY* at its most gothic. The Japanese can mount a potent first strike. Pre-emptive destruction of American forces is possible; the Japanese will pay heavily in downed aircraft. The Americans, as shown, can survive this, and win a "victory" on points, paid for with the lives of the escort crews and the Midway garrison. Nothing comes cheaply in *MIDWAY.*

The *Scattergun Attack* is expensive, its greatest drawback. The death of Japanese carrier aviation may seem unacceptable. Why not focus on the American carriers, using the other extreme?

Diagram 2 shows the U.S. *Hex* formation, under the *Funnel Attack.* The extreme version, of course, would subject one carrier to this:

	T11	
T10	D28	T10

This is somewhat wasteful. The *Funnel Attack,* as shown in Diagram 2, goes for all three carriers and ignores the escort. This more logically counterpoints the *Scattergun.* Chart 2 shows potential results.

Note that the entire screen, unmolested, still won't save all the carriers. The Americans have 11 shots against 12 attacking groups. Even so, the "Pattern A" defense, in trying to cover all three carriers, lost two of them, with a third crippled, *even with below-average enemy luck.* The "Pattern B" defense sacrificed the center carrier to save the outer two; the attack was lucky against *Yorktown.* Average luck would have left *Yorktown* and *Enterprise* with three hits each, but afloat and operational.

Some tactical object lessons have been demonstrated in Chart 2. A concentrated attack has advantages, but can be blunted by defenders' sacrifices. Two intact carriers can retaliate; three sunken or crippled ones cannot. Massed firepower can stop *a* massed attack.

The *Funnel Attack,* whatever the American formation, does leave the Japanese with a strong air arm, ready to repeat the tactic against two damaged carriers. However, pre-emptive removal of American air power, the whole point of the game, isn't guaranteed. The Americans could very well hit back.

Two extreme approaches have been discussed: The *Scattergun Attack* stressed dispersion, to overload the defense; the *Funnel Attack* stressed concentration, focusing on the carriers. Each attack has its drawbacks. Why not compromise?

The *Prototype Attack* offers such a compromise. This attack, as before, assigns strikes by target type. Each carrier faces the following:

DIAGRAM 1. Scattergun Attack vs. Hourglass Formation

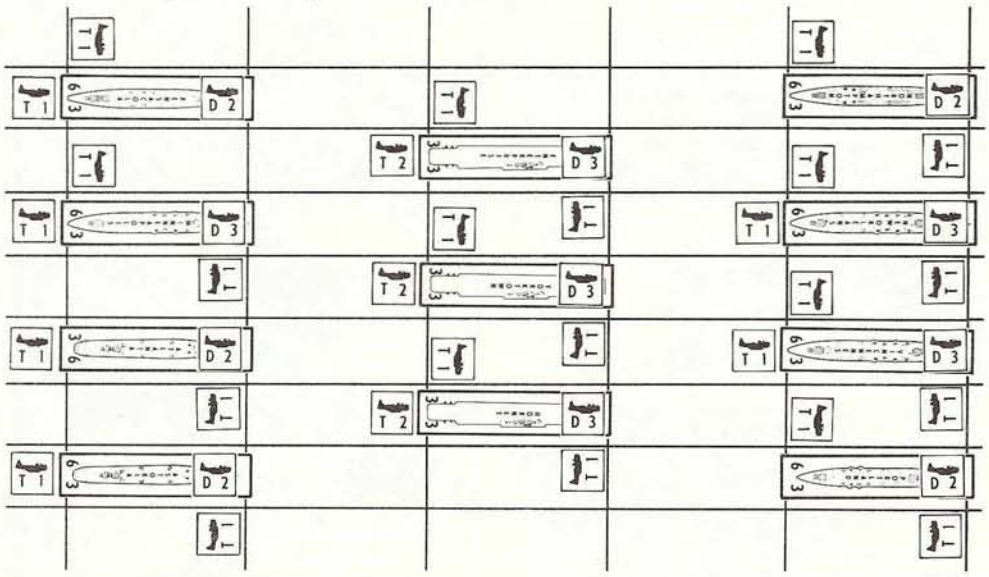


CHART 1A. General Defense Against Scattergun Attack

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F28	F26	—	1-1	6	-3 Def/-6 Att	F22 (IJN)
T2	Hornet	Astoria	1-2	2	Miss/lose 2 sqd	—
T2	Yorktown	Minneapolis	1-2	2	Miss/lose 2 sqd	—
T2	Enterprise	Pensacola	1-2	6	1 hit/lose 4 sqd	—
D3	Yorktown	Atlanta	1-2	2	Miss/lose 2 sqd	D1
D3	Hornet	Hornet	1-1	4	1 hit/lose 4 sqd	—
D3	Enterprise	Enterprise	1-1	3	1 hit/lose 3 sqd	—
T1	Yorktown	Yorktown	1-3	1	Miss/lose 3 sqd	—
D2	Portland	Portland	1-2	5	1 hit/lose 3 sqd	—
D3	Vincennes	Vincennes	1-1	1	1 hit/lose 2 sqd	D1
D3	New Orleans	New Orleans	1-1	3	1 hit/lose 3 sqd	—
D2	Northampton	Northampton	1-2	4	1 hit/lose 4 sqd	—
T1	Astoria	—	1-1	5	2 hits/lose 4 sqd	—
T1	Astoria	—	1-1	5	2 hits/lose 4 sqd/S	—
D2	Astoria	—	n/a	—	—	D2
D2	Atlanta	—	2-1	1	1 hit/lose 2 sqd	—
T1	Atlanta	—	1-1	3	1 hit/lose 3 sqd	—
T1	Atlanta	—	1-1	3	1 hit/lose 3 sqd/S	—
D3	Minneapolis	—	3-1	6	4 hits/lose 2 sqd	D1
T1	Minneapolis	—	1-1	1	1 hit/lose 2 sqd/S	—
T1, T1	Minneapolis	—	n/a	—	—	T2
D2	Pensacola	—	2-1	2	1 hit/lose 3 sqd	—
T1	Pensacola	—	1-1	4	1 hit/lose 4 sqd	—
T1	Pensacola	—	1-1	4	1 hit/lose 4 sqd/C	—
T1	Hornet	—	1-1	5	2 hits/lose 4 sqd	—
T1	Hornet	—	1-1	6	2 hits/lose 3 sqd/S	—
T1	Yorktown	—	1-1	3	1 hit/lose 2 sqd	—
T1	Enterprise	—	1-1	6	2 hits/lose 3 sqd	—
T1	Enterprise	—	1-1	1	1 hit/lose 2 sqd/S	—
T1	Portland	—	1-1	4	1 hit/lose 4 sqd	—
T1	Portland	—	1-1	4	1 hit/lose 4 sqd/C	—
T1	Vincennes	—	1-1	5	2 hits/lose 4 sqd	—
T1	Vincennes	—	1-1	6	2 hits/lose 3 sqd/S	—
T1	Vincennes	—	n/a	—	—	T1
T1	New Orleans	—	1-1	5	2 hits/lose 4 sqd	—
T1	New Orleans	—	1-1	3	1 hit/lose 3 sqd	—
T1	New Orleans	—	1-1	3	1 hit/lose 3 sqd/S	—
T1	Northampton	—	1-1	1	1 hit/lose 2 sqd	—
T1	Northampton	—	1-1	6	2 hits/lose 3 sqd/S	—

Score: US has 1 CV, 2 crippled CA left
IJN has F22, D5, T3 left

Note: In this and all subsequent charts, the letter "S" means that that ship was sunk; "C" means crippled.

CHART 1B. Carrier Defense Against Scattergun Attack

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F28	F26	—	1-1	5	-4 Def/-4 Att	F24
T2	Hornet	Astoria	1-2	6	1 hit/lose 4 sqd	—
T2	Yorktown	Minneapolis	1-2	2	Miss/lose 2 sqd	—
T2	Enterprise	Pensacola	1-2	5	1 hit/lose 3 sqd	—
D3	Hornet	Atlanta	1-2	6	1 hit/lose 4 sqd	—
D3	Yorktown	Yorktown	1-1	5	2 hits/lose 4 sqd	—
D3	Enterprise	Enterprise	1-1	4	1 hit/lose 4 sqd	—
T1	Hornet	Hornet	1-3	2	Miss/lose 3 sqd	—
T1	Hornet	Portland	1-3	3	Miss/lose 3 sqd	—
T1	Yorktown	Vincennes	1-3	3	Miss/lose 3 sqd	—
T1	Yorktown	New Orleans	1-3	1	Miss/lose 3 sqd	—
T1	Enterprise	Northampton	1-3	4	Miss/lose 4 sqd	—
T1	Enterprise	—	1-1	4	1 hit/lose 4 sqd	—
D2	Astoria	—	2-1	2	1 hit/lose 3 sqd	—
T1	Astoria	—	1-1	3	1 hit/lose 3 sqd	—
T1	Astoria	—	1-1	5	2 hits/lose 4 sqd/S	—
D2	Atlanta	—	2-1	1	1 hit/lose 2 sqd	—
T1	Atlanta	—	1-1	1	1 hit/lose 2 sqd	—
T1	Atlanta	—	1-1	6	2 hits/lose 3 sqd/S	—
D3	Minneapolis	—	3-1	3	3 hits/lose 3 sqd	—
T1	Minneapolis	—	1-1	1	1 hit/lose 2 sqd	—
T1	Minneapolis	—	1-1	4	1 hit/lose 4 sqd/S	—
T1	Minneapolis	—	n/a	—	—	T1
D2	Portland	—	2-1	6	3 hits/lose 3 sqd	—
T1	Portland	—	1-1	2	1 hit/lose 3 sqd/S	—
T1	Portland	—	n/a	—	—	T1
D3	Vincennes	—	3-1	6	4 hits/lose 2 sqd	D1
T1	Vincennes	—	1-1	6	2 hits/lose 3 sqd/S	—
T1, T1	Vincennes	—	n/a	—	—	T2
D3	New Orleans	—	3-1	2	2 hits/lose 3 sqd	—
T1	New Orleans	—	1-1	4	1 hit/lose 4 sqd	—
T1	New Orleans	—	1-1	3	1 hit/lose 3 sqd	—
T1	New Orleans	—	1-1	1	1 hit/lose 2 sqd/S	—
D2	Northampton	—	2-1	4	2 hits/lose 4 sqd	—
T1	Northampton	—	1-1	6	2 hits/lose 3 sqd/S	—
T1	Northampton	—	n/a	—	—	T1

Score: US has Yorktown (2 hits), Hornet (2 hits), Enterprise (3 hits) still afloat; all escorts sunk.
IJN has F24, T5, D1 left.

T3
T1 D6 T1
Each heavier cruiser is prescribed:
T1
T1 D2 —
Each four-hit cruiser gets:
T1
T1 D1 —
The *Atlanta* gets what's left:
T1
T1 — —

The torpedo attacks on the cruisers, of course, can be from either or both sides, preferably on the outer (less protected) side of the formation.

Note the influence of the *Scattergun,* with attacks throughout the fleet: 35 in all. The *Funnel* influence shows in the shift of power toward the carriers. This attack will still cause heavy air losses. But, the advantage of each air arm is utilized fully; torpedo bomber dispersion strains ship fire while divebomber concentration diverts it.

Diagram 3 shows the *Prototype* going in against the *Column* formation. Chart 3 shows some typical results, illustrating how the word "compromise" can have several meanings.

I show the *Prototype Attack* for another reason. The air attack comes in multiples of three, or as single factors. Since the Americans fire in multiples of three, any excess Japanese factors (e.g.: 4-3) would be wasted. Five factors attack an American ship no better than three.

Three Japanese attacks, two extremes and a compromise, have been demonstrated. The tactical lessons should be obvious. Massed force (i.e.: all available CSF aircraft) is essential to any attack, for the defense must be given no respite. The same is true, of course, for a U.S. first strike. Further, enemy striking power must be destroyed on the flight deck to stop any reprisals. And, massed force is necessary because of the horrid air losses. Once committed, a fleet's air arm will be largely expended, whether successful or not.

The third tactical imperative, then, is hit hard, with everything you have, or not at all.

This consideration applies to all splitting of carrier air, except for the CAP decision. The Wave Attack rule is a good case in point. True, it permits more low-odds attacks, deadly indeed as we have seen. But it permits the defense more chances to fire. The three attacks showed how the Americans' 11 shots could be overwhelmed. The Wave Attack rule detracts from this, and the tactic shouldn't be used.

A final illustration of massed air attack spotlights CSF vulnerability. Diagram 5 shows the CSF under attack by all U.S. carrier aircraft. The Japanese formation is chosen with the Anvil rule in mind; this example allows interlocking and flexible fields of fire, especially ahead of the carriers where the Anvil will go.

The Japanese have several weaknesses. The escort is small, with four ships (ignoring the *Nagara*). Japanese carriers are easier to sink than their American counterparts, except for *Akagi* and *Kaga.* Further, five air factors will suffice for each battleship, to divert it or sink it.

The tactical problem, again, is one of defensive sacrifice. Sacrifice of the escort is an apparent need. Sacrifice of certain carriers is another painful requirement. *Soryu* and *Hiryu,* the weaker carriers, each carry a quarter of the CSF aircraft, so they aren't easily discarded. But the attack of 20 air groups against nine ships makes such choices necessary.

Chart 5 shows how the American version of the *Funnel* went. American weakness in torpedo bombers rules out a dispersed, *Scattergun* approach.

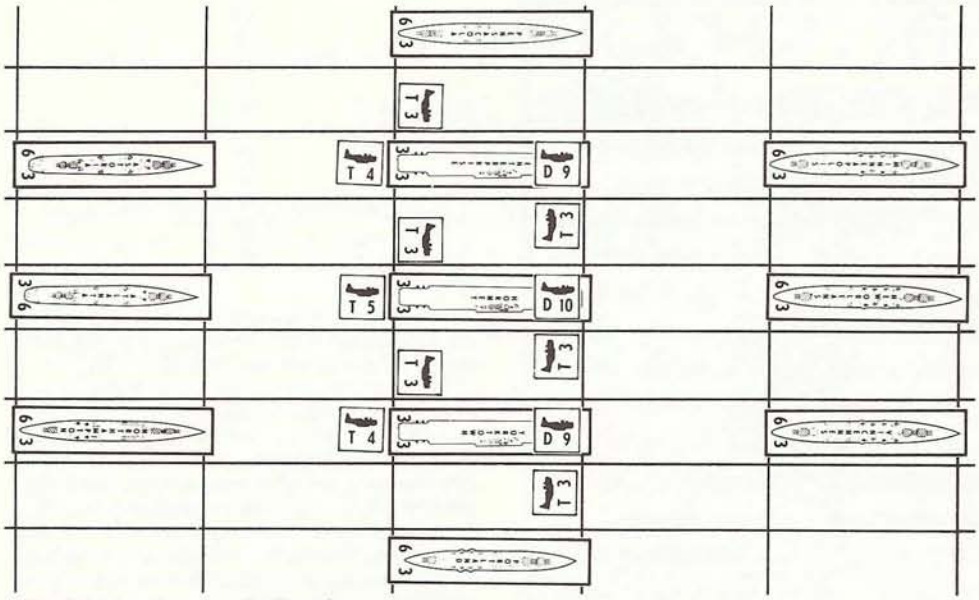


DIAGRAM 2. Funnel Attack vs. Hex Formation

CHART 2. Defense Against Funnel Attack

Pattern A: General Defense

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F28	F26	—	1-1	5	-4 Def/-4 Att	F24
D10	Hornet	Atlanta	1-1	2	1 hit/lose 2 sqd	D8
T5	Hornet	Hornet	1-1	4	1 hit/lose 4 sqd	T1
T4	Yorktown	Northampton	1-1	3	1 hit/lose 3 sqd	T1
T4	Enterprise	Astoria	1-1	1	1 hit/lose 2 sqd	T2
D9	Yorktown	Yorktown	3-1	4	3 hits/lose 2 sqd	D7
D9	Enterprise	Enterprise	3-1	2	2 hits/lose 3 sqd	D6
T3	Yorktown	Portland	1-1	6	2 hits/lose 3 sqd/S	—
T3	Yorktown	—	n/a	—	—	T3
T3	Hornet	Vincennes	1-1	1	1 hit/lose 2 sqd	T1
T3	Hornet	Minneapolis	1-1	4	1 hit/lose 4 sqd/C	—
T3	Enterprise	New Orleans	1-1	3	1 hit/lose 3 sqd	—
T3	Enterprise	Pensacola	1-1	1	1 hit/lose 2 sqd/S	T1

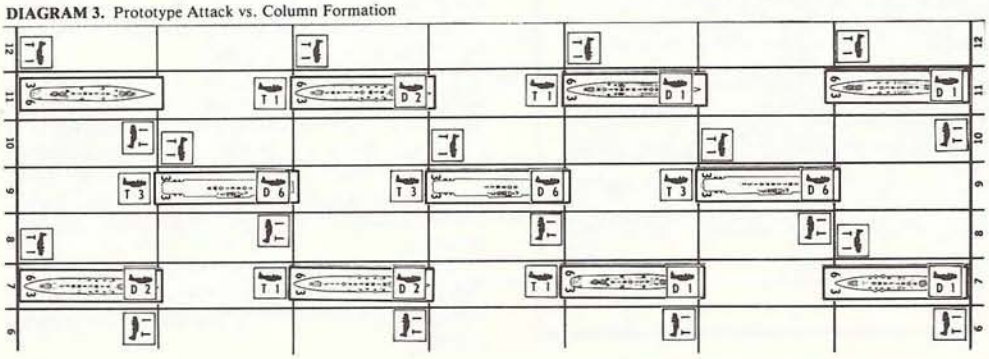
Results: US left with 1 crippled CV, 8 CA; IJN has F24, D21, T9.
IJN results below average.

Pattern B: Sacrifical Defense

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F28	F26	—	1-1	1	-6 Def/-3 Att	F25
D9	Yorktown	Hornet, Yorktown	1-1	5	2 hits/lose 4 sqd	D5
T4	Yorktown	Northampton, Portland	1-2	6	1 hit/lose 4 sqd	—
T3	Yorktown	Vincennes	1-1	2	1 hit/lose 2 sqd	T1
T3	Yorktown	Minneapolis	1-1	6	2 hits/lose 3 sqd/S	—
D9	Enterprise	Atlanta	1-1	4	1 hit/lose 4 sqd	D5
T4	Enterprise	Astoria, Pensacola	1-2	1	Miss/lose 2 sqd	T2
T3	Enterprise	Enterprise	1-1	4	1 hit/lose 4 sqd	—
T3	Enterprise	New Orleans	1-1	2	1 hit/lose 2 sqd	T1
D10	Hornet	—	5-1	—	sunk/lose 0 sqd	D10
T3, T3, T5	Hornet	—	n/a	—	—	T11

Results: US left with 1 CV, 8 CA; IJN has F25, D20, T15.
Results on Yorktown far above average.

DIAGRAM 3. Prototype Attack vs. Column Formation



THE VISION OF JUDGEMENT

The diagrams show demonstration attacks against various American defense formations. All attacks assume:

1. A unified American fleet, with interlocking defensive fires, and a minimal chance of search-board discovery.
2. A full-strength strike by the Carrier Strike Force (F28, D28, T31) or the U.S. carriers (F26, D36, T15) without the Midway contingent.
3. The Carrier Strike Force is alone, except in Diagrams 6 and 7.
4. The *Anvil* rule is in force.

Where many attacks are made, the strain will be too much for the counter mix. Rather than make counters, players can use F1 and D1 counters for torpedo attacks, as T1 counters will run out quickly. Enemy T1 counters, and T1 or B1 counters from the variant set, can also suffice. The positioning of attacking aircraft should leave no doubt as to nationality and type.

American and Japanese fighter (F) counters are an exception to this expedient. The CSF fighters outnumber U.S. carrier fighters 28-26; Midway fighters provide a U.S. majority of 32-28; only the *Zuiho* evens the balance 32-32. Fighter counters should be reserved for CAP counterattacks on the board.

Charts are numbered to match the diagrams; Charts 1A and 1B show battles on Diagram 1, and so forth. Charted attacks were resolved, not with a die, but with a card deck of 24 cards, ace through six. This didn't guarantee average luck, but did moderate it.

Attacks and defense formations are interchangeable, of course.

Attacks on the *Soryu* and *Hiryu* shouldn't be too powerful, as four 1-1s will easily sink them. The attacks on those two ships, if overdone, will make sacrifice an easy Japanese choice. Rather, if the American divebombers are concentrated over *Akagi* and *Kaga,* say, D6 on each and D3 on the other two, all four will be evenly threatened. A sacrifice ploy will not seem attractive, or easy.

The four Kumano class cruisers will enhance CSF defenses considerably. An American attack will still find openings, but 15-17 torpedo factors won't spread very far. Better to use a concentrated attack, as Diagram 6 shows. (The results I leave for you to guess.) Be assured, though, that the carriers won't go unscathed.

By now, you've noted the effectiveness of five air factors (especially divebombers) over battleships. Unopposed, those five factors will destroy any vessel. Even the *Yamato.*

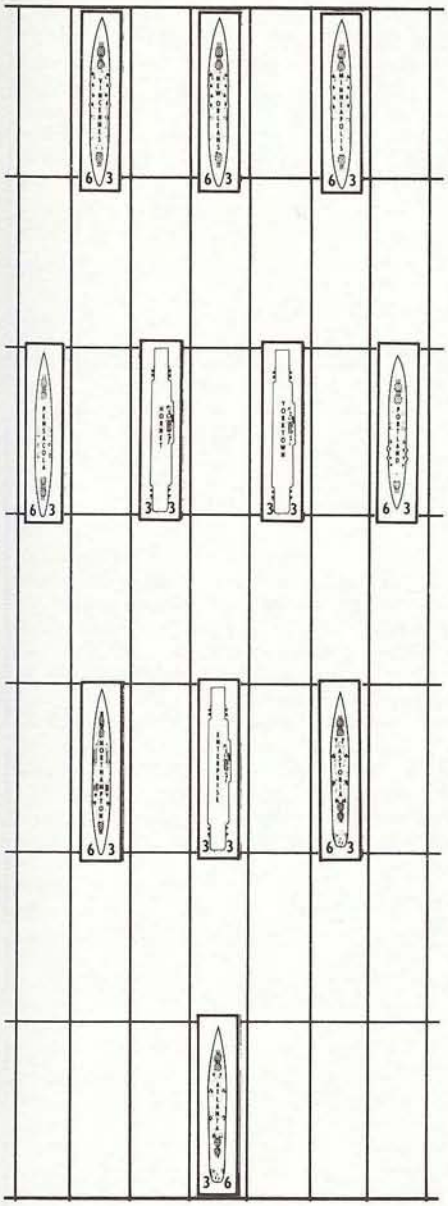
Let's suppose the Americans elude the Carrier Strike Force, the four Kumano class cruisers, and the Invasion Force. The Japanese suspect a combined attack from the Midway area and search vainly eastward. But, the Americans have skulked west and are stalking the Main Force. Note the result on Diagram 7. The Japanese can save the Yamato, or one (or even both) of the Mutsu class battleships, given most setups. They will lose the rest of the Main Force right off, and the *Yamato* would suffer the same T5/D5 drill two turns later. The Invasion Force could be next on the menu, if the CSF can't cover it.

One good strategic feature of the Yamato Gambit: the three heaviest Japanese battleships will have been pre-emptively eliminated. A surface action isn't as daunting a prospect. A small concession, for the Americans may find departure a problem, as the enemy is apt to be between them and the east edge. The Main Force is valued at 32 points. That more than makes up for the loss of Midway. The strategy may be worthwhile, then, if risky—and unpredictable.

The tactics presented herein are not meant as infallible. They serve three purposes: to emphasize and demonstrate battle-board tactics; to show the value of massed, pre-emptive attacks; and, most of all, to open new directions in game tactics. The attacks we've seen herein can be, and should be, improved on.

MIDWAY has remained a dynamic game over the years. Play can be subtle and swift. Much has been written on this Avalon Hill classic (serious players should, if they have not already done so, obtain a copy of the WARGAMER'S GUIDE TO MIDWAY, a collection of the best articles published in past pages of *THE GENERAL*) and much more awaits. New tactics, more powerful attacks, and the forces' revealed weaknesses should heighten the drama. It is hoped that this study will encourage players, both casual and "pro", to further investigate the potentials of this fine game in print; inevitably, even the pre-emptive strike tactics may be surpassed. As we've seen, *MIDWAY* will enter its third decade with still much to teach—and enthrall—the gamer.

DIAGRAM 4. Wedge Formation



The Wedge Formation's aim is to meet the Anvil threat. No bow hex, except for the lead ship, is entirely uncovered. The idea is worth considering if the Japanese player is used to attacking your linear formations. Asymetrical formations are not advised. Any uneven spread of carriers and screen could very well allow partial isolation and destruction of the fleet.

CHART 3. Carrier Defense Against Prototype Attack

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F28	F26	—	1-1	5	-4 Def/-4 Att	F24
D6	Yorktown	Atlanta	1-1	3	1 hit/lose 3 sqd	D3
T3	Yorktown	Vincennes	1-1	6	2 hits/lose 3 sqd	—
T1	Yorktown	Yorktown	1-3	1	Miss/lose 3 sqd	—
T1	Yorktown	Minneapolis	1-3	4	Miss/lose 4 sqd	—
D6	Hornet	New Orleans	2-1	5	2 hits/lose 4 sqd	D2
T3	Hornet	Hornet	1-1	3	1 hit/lose 3 sqd	—
T1	Hornet	Astoria	1-3	3	Miss/lose 3 sqd	—
T1	Hornet	Northampton	1-3	1	Miss/lose 3 sqd	—
D6	Enterprise	Enterprise	2-1	4	2 hits/lose 4 sqd	D2
T3	Enterprise	Portland	1-1	2	1 hit/lose 2 sqd	T1
T1	Enterprise	Pensacola	1-3	2	Miss/lose 3 sqd	—
T1	Enterprise	—	1-1	3	1 hit/lose 3 sqd/C	—
D2	Vincennes	—	2-1	1	1 hit/lose 2 sqd	—
T1	Vincennes	—	1-1	5	2 hits/lose 4 sqd	—
T1	Vincennes	—	1-1	6	2 hits/lose 3 sqd/S	—
T1	Atlanta	—	1-1	2	1 hit/lose 2 sqd	—
T1	Atlanta	—	1-1	6	2 hits/lose 3 sqd/S	—
D2	Minneapolis	—	2-1	4	2 hits/lose 4 sqd	—
T1	Minneapolis	—	1-1	5	2 hits/lose 4 sqd	—
T1	Minneapolis	—	1-1	1	1 hit/lose 2 sqd/S	—
D2	New Orleans	—	2-1	4	2 hits/lose 4 sqd	—
T1	New Orleans	—	1-1	6	2 hits/lose 3 sqd	—
T1	New Orleans	—	1-1	2	1 hit/lose 2 sqd/S	—
D1	Astoria	—	1-1	3	1 hit/lose 3 sqd	—
T1	Astoria	—	1-1	2	1 hit/lose 2 sqd	—
T1	Astoria	—	1-1	3	1 hit/lose 3 sqd/C	—
D1	Northampton	—	1-1	1	1 hit/lose 2 sqd	—
T1	Northampton	—	1-1	6	2 hits/lose 3 sqd	—
T1	Northampton	—	1-1	3	1 hit/lose 3 sqd/S	—
D1	Portland	—	1-1	4	1 hit/lose 4 sqd	—
T1	Portland	—	1-1	4	1 hit/lose 4 sqd	—
T1	Portland	—	1-1	1	1 hit/lose 2 sqd/C	—
D1	Pensacola	—	1-1	6	2 hits/lose 3 sqd	—
T1	Pensacola	—	1-1	2	1 hit/lose 2 sqd	—
T1	Pensacola	—	1-1	2	1 hit/lose 2 sqd/S	—

Result: US has 2 CV left (1 crippled); 2 crippled CA left; IJN has F24, D7, T1 left.

DIAGRAM 5. The Carrier Strike Force

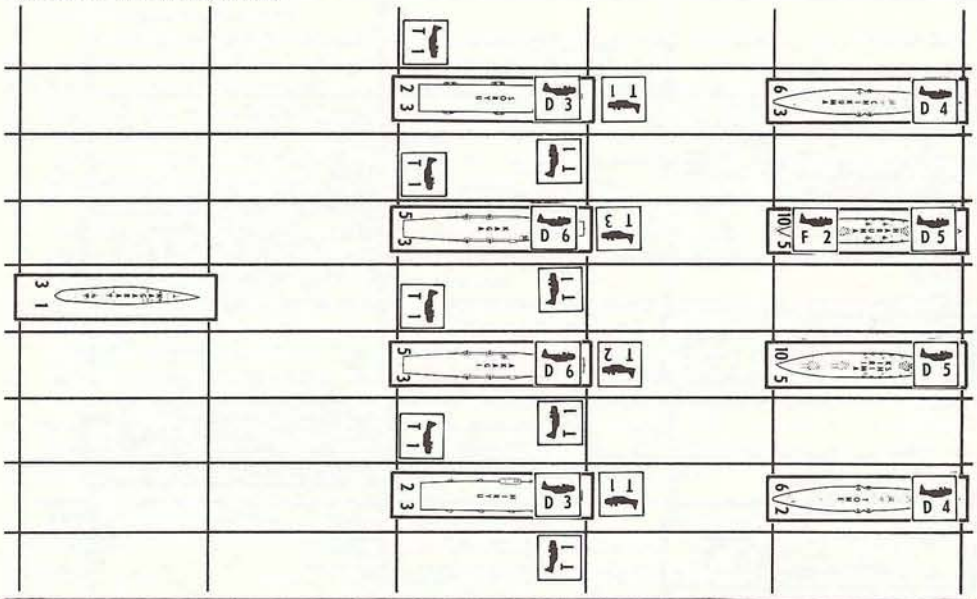


CHART 5. American vs. The Carrier Strike Force

ATTACKER	TARGET	FIRING SHIP	ODDS	ROLL	RESULT	SURVIVING AIRCRAFT
F26	F26	—	1-1	5	-4 Def/-4 Att	F22
T1	Akagi	Tone, Nagara	1-3	2	Miss/lose 3 sqd	—
T2	Akagi	Hiryu	1-2	3	Miss/lose 3 sqd	—
T1 (port)	Akagi	Akagi	1-3	2	Miss/lose 3 sqd	—
D6	Akagi	Kirishima	1-1	6	2 hits/lose 3 sqd	D3
T1	Kaga	Kaga	1-3	3	Miss/lose 3 sqd	—
T3	Kaga	Chikuma	1-1	2	1 hit/lose 2 sqd	—
T1 (port)	Kaga	Soryu	1-3	1	Miss/lose 3 sqd	—
D6	Kaga	Haruna	1-1	4	1 hit/lose 4 sqd	D2
D5	Haruna	IJN F2	2-1	1	1 hit/lose 2 sqd	D3
D5	Kirishima	—	5-1	—	sunk	D5
D4	Tone	—	4-1	4	5 hits/lose 2 sqd/S	D2
D4	Chikuma	—	4-1	5	6 hits/lose 2 sqd/S	D2
D3	Hiryu	—	3-1	1	2 hits/lose 3 sqd	—
T1	Hiryu	—	1-1	3	1 hit/lose 3 sqd/S	—
T1, T1	Hiryu	—	n/a	—	—	T2
D3	Soryu	—	3-1	6	4 hits/lose 2 sqd	D1
T1, T1, T1	Soryu	—	n/a	—	—	T3
—	Nagara	—	not worth it			—

Result: CSF left with Akagi, Kaga (2 hits each), 1 BB, 1 CL; US left with F22, D18, T5 plus Midway aircraft.

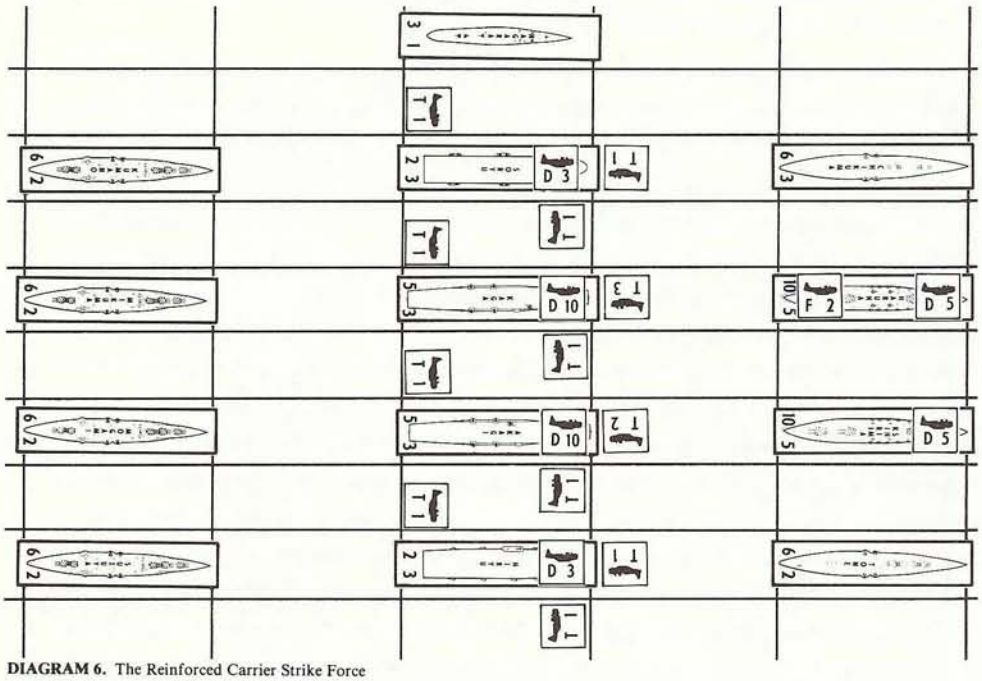
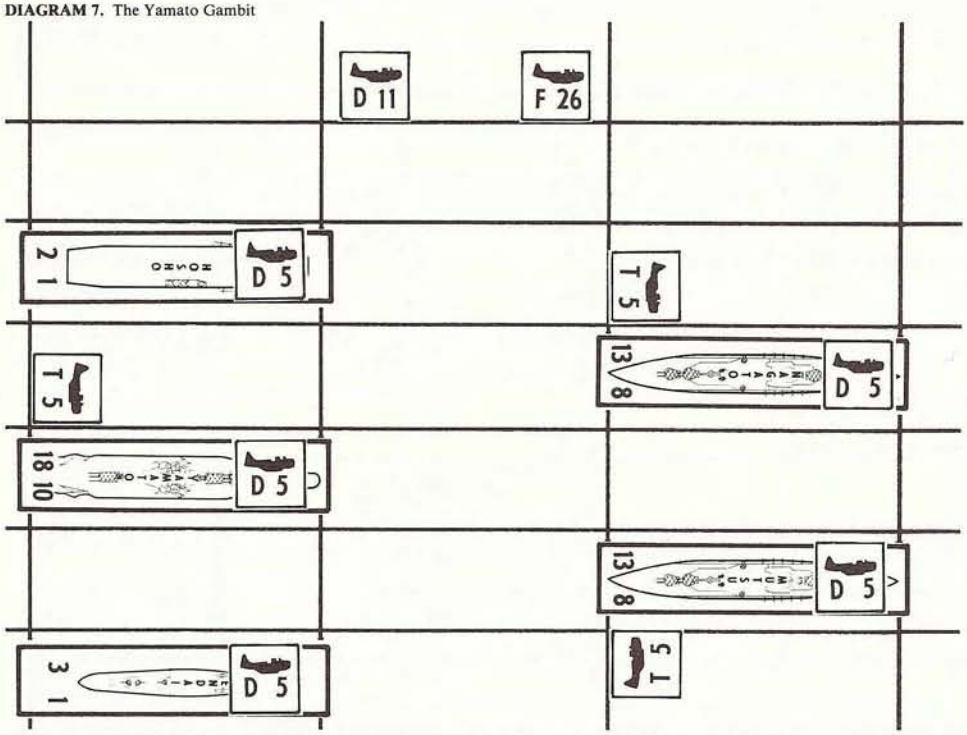


DIAGRAM 6. The Reinforced Carrier Strike Force

DIAGRAM 7. The Yamato Gambit



ORIGINS '82

JULY 23-24-25, 1982

The National Adventure Gaming Show is returning to its birthplace in Baltimore, MD bigger and grander than ever before. ORIGINS '82 promises to be the biggest extravaganza yet staged in the burgeoning Adventure Gaming hobby. Never before have so many Adventure Gaming manufacturers exhibited their wares in one show. Consumers will be treated to the largest exhibition ever of sophisticated gaming materials; role playing, wargames, sports games, miniatures, computer games, and much more will all be on exhibition with many companies unveiling brand new products for the first time.

ORIGINS '82 will also feature hundreds of events ranging from big money tournaments, to free demonstrations and seminars by hobby personalities; all in the most comfortable and impressive site yet chosen for an ORIGINS.

For pre-registration information, send a stamped, self-addressed envelope to: ORIGINS '82, P.O. Box 15405, Baltimore, MD 21220.

THE WARGAMER'S GUIDE TO MIDWAY

Containing thirty-six pages of the best of *THE GENERAL* articles on the game plus previously unpublished material as well, this guide is a must for every fan of the game. Several official rules changes update the game and erase its few minor flaws. A tribute to one of the hobby's eldest citizens that has never needed a major revision. A game which has grown old gracefully, maturing by getting better.

Almost all of the reprinted articles are from unavailable issues of *THE GENERAL*, many from volume 9 or earlier. Included is the first major variant, "Leyte Gulf", and the most in-depth article on the game to date "The MIDWAY Thesis" by two of the game's experts, Harold Totten and Donald Greenwood. "The Pacific Theatre Via MIDWAY", the other major variant that spawned the MIDWAY Variant Kit, has been expanded to include many more optional rules (some applicable to the MIDWAY game as well) and an additional scenario. "The Battle For Australia", a previously unpublished article adds the ultimate with a hypothetical monster scenario using the components of both the game and the variant kit. Other articles deal with strategy, analysis, variants, and other hypothetical situations. The best of three Series Replays that have appeared in *THE GENERAL* is also reprinted, useful in itself as a fine example of the subtle strategies involved when experienced players meet.

THE WARGAMER'S GUIDE TO MIDWAY sells for $4.50 plus 10% postage and handling charges, and is available from our mail order dept. Maryland residents please add 5% sales tax.

MAGNETIC GAMES

Now you can convert your favorite game for vertical display or secure in-play storage with magnetic tape, unmounted boards and just an hour of your time. All you'll need is a metal surface and an unmounted gameboard. We supply the magnetic strips with self sticking adhesive already applied. You just cut the ½" x 1' strips into half inch squares and apply them to the unit counters which came with your game. The result is a ⅛" thick counter which will stack six high even when the mapboard is mounted in a vertical position for display purposes. Never worry about that pbm move being jostled again between turns.

Naturally this magnetic treatment will be less valuable for counters with two-sided printing, but that still leaves them with a multitude of uses. NOTE: it will be necessary to be sure that the top portion of all unit counters are uniformly applied to the top half of the magnetic strips. Otherwise, the polarity may be reversed and the counters will actually repel each other rather than attract. Therefore, it is wise to mark the back of the magnetic strips uniformly across the top so as to be sure to apply the top half of the counter to the top half of the magnetic strip.

Magnetic strips are available from Avalon Hill for 90¢ a foot or $7.50 for ten feet. Unmounted mapboards are available upon request for $6.00 apiece. Usual postage charges apply, as does the 5% state sales tax for Maryland residents.

MICROCOMPUTER GAMES UPDATE

The Microcomputer Game Division of Avalon Hill has expanded its line to provide cassette programs for the ATARI 800 as well as diskettes for the TRS-80 II, APPLE II and ATARI 800 computers. All four cassette versions come in the same package, unless specified otherwise below; that is, TRS-80 II, APPLE II, PET and ATARI 800 versions are spaced at intervals on the same tape. Diskette versions come with only one version in the package so it is essential that the computer model be specified when ordering in addition to noting the memory requirements. A complete listing of the Microcomputer Game Division offerings follows:

B-1 NUCLEAR BOMBER, NORTH ATLANTIC CONVOY RAIDER, AND *NUKEWAR* are available in 16K cassettes for all four computers for $16.00. A 32K diskette is available for the TRS-80, a 24K version for the ATARI and a 48K version for the APPLE for $21.00

MIDWAY CAMPAIGN is available in 16K cassettes for the TRS-80, APPLE and PET and in 32K for ATARI for $16.00. A 32K diskette is available for the TRS-80, 48K for APPLE, and 40K for ATARI at $21.00.

PLANET MINERS is available in 16K cassettes for the TRS-80, APPLE, and PET and a 24K version for the ATARI priced at $16.00. 32K diskette is available for the TRS-80 and ATARI, 48K for the APPLE at $21.00.

COMPUTER ACQUIRE is available in 16K cassettes for all four computer models for $20.00. A 32K diskette version for the TRS-80, a 48K version for the APPLE and a 24K version for the ATARI are available for $25.00.

CONFLICT 2500 is available in 16K cassettes for the TRS-80, APPLE and PET, and a 32K version for the ATARI for $16.00. In the diskette: 32K for TRS-80, 48K for APPLE and 40K for ATARI at $21.00.

MAJOR LEAGUE BASEBALL is available in 16K cassette for the TRS-80 model only at $25.00; it is available in 32K diskette for TRS-80 and 48K diskette for APPLE at $30.00

EMPIRE OF THE OVERMIND is available in 48K cassettes for the TRS-80 and APPLE and a 40K version for ATARI for $30.00. 48K diskettes for the TRS-80 and APPLE and a 40K version for ATARI are available for $35.00 each.

TANKTICS is available in 16K cassettes for the TRS-80, APPLE and PET and in a 24K version for the ATARI priced at $24.00. A 32K diskette for ATARI and a 48K diskette for the APPLE are priced at $29.00

GALAXY is a new release, available in 16K cassette versions for all four models for $20.00. 32K diskettes for TRS-80 and ATARI and a 48K diskette for APPLE are available for $25.00.

GUNS OF FORT DEFIANCE is now available in 16K cassettes for TRS-80 and PET and in 32K cassettes for ATARI and APPLE for $20.00. A 32K diskette version for the TRS-80 or a 48K diskette version for the APPLE costs $25.00.

DNIEPER RIVER LINE is available in 32K cassettes for the TRS-80, PET and APPLE and in a 48K version for ATARI at $25.00. And, a 32K diskette version for TRS-80 and 48K diskette versions for APPLE and ATARI are available for $30.00.

VOYAGER, the only title available in 16K cassette for the TRS-80 COLOR model, costs $20.00. 32K cassettes for APPLE and PET, 16K cassette for TRS-80, and 24K cassette for ATARI are also available for $20.00. On diskette: 48K version for APPLE and 32K version for ATARI priced at $25.00.

BLITZ JAPANESE

How to Pronounce Oi, Ise, Hiei, et al.

by
Chris L. Roehl

Translations by
Grace Beard
Trinity University, San Antonio

ルです　を超え
アバロ　ロンヒ
超えた　たパズ

The written Japanese language includes fifty-one phonetic signs—an alphabet of sounds. Though ideographic, Japanese can be written in arabic letters using a syllabary. However, this only hints at how a word is pronounced. Inflection and speed of pronunciation are unknowns and some letters are silent or not pronounced as they appear. The result is fractured Japanese.

The translations given here are from the ideographic characters (calligraphy), as read by Grace. Don't let her name fool you. She is a native Japanese, born of a Christian family, and while a young woman, lived in Tokyo throughout the Pacific War. The phonetic interpretations are my own based on her pronunciations in face-to-face sessions.

With a few exceptions, the type of Japanese warship may be determined by its name (if you can read Japanese). Aircraft carriers are named after mythical flying objects, animals, or large birds. Some conversions retained their original hull name: *Kaga, Akagi, Chitose, Chiyoda,* and *Shinano*. Some did not: *Shoho, Zuiho, Ryuho,* (former submarine tenders *Tsurugizaki, Takasaki,* and *Taigei* respectively), and *Hiyo* and *Junyo,* (former luxury liners *Izumo Maru* and *Kashiwara Maru).* Battleships are named after ancient provinces similar to our practice of naming battleships after states. Heavy cruisers are named after mountains, as are the four *Kongo* class fast battleships originally classed as battlecruisers. Light cruisers are named after rivers. (The *Mogami* and *Tone* class CA's were laid down as CL's, hence the exception.) Destroyers are paradoxically given poetic interpretations of weather conditions: *Kawakaze, (River Wind); Shigure, (Drizzling Autumn Rain).* When in 1944-45, construction concentrated on more destroyers of smaller design, their names included flowers, fruit, and trees. The three types of submarine are I, RO, and HA—the first three sounds of the Japanese "alphabet" thus corresponding to A, B, and C.

The names of Japanese aircraft carriers are quite picturesque and often convey an intangible idea and are thus quite difficult to translate accurately as one can the names of mountains, rivers, and provinces. For example, the *Hosho* translates *Auspicious Bird.* However, the *idea* conveyed is of a gigantic imaginary bird with a 3,000 mile wing span, and able to fly 90,000 miles in one hop! It is a name full of great expectations for The Imperial Japanese Navy's first aircraft carrier. Important ships were given appropriately portentous names—see *Kongo,* and *Yamato* for other examples of this practice, keeping in mind not their fate but their significance to Japan as the finest of their kind in all the world's navies.

The ship names translated below are grouped by type, class, and order of construction, or conversion. The information given is the arabic spelling, the phonetic pronunciation showing emphasis over the appropriate sound, and an indication of the speed in which the sounds are pronounced, (*F*ast, *N*ormal, *S*low), and a definition or origin of the name.

The phonetic interpretation shows the pronunciation of the ship names as they *sound.* In some cases the vowel sounds are pronounced as one sound—a compound sound of two vowels pronounced so closely toether that they cannot be distinguished as two distinct sounds. An example is the *Zuikaku.* "Zui" is pronounced more like "Zwee" than "Zoo-ee". Some names are pronounced with equal emphasis on all sounds, (or no emphasis at all depending on your outlook). The vowels, (A, I, U, E, O), are pronounced as follows: A as ah, like "Open wide and say ah."; I as a hard E, like "easy"; U as ooo, like "ooze"; E as a hard A, like "ale"; and O as a hard O, like "Oh, no!". The consonants are pronounced as in English with a few exceptions which will be explained individually.

AIRCRAFT CARRIERS

HOSHO	HOE SHO (S S) Auspicious Bird.
KAGA	KAH GAH (N N) Old name for Ishikawa Prefecture. ("Increased Joy", S.E. Morrison.)
AKAGI	AH KAH GEE (N N N) (Hard "G", like "geese".) Mountain in Gumma Prefecture. ("Red Castle", Morrison.)
RYUJO	REEOO JOE (N N) Vigorous Dragon.
SORYU	SORE REEYOU (F S) (Equal emphasis.) Green Dragon
HIRYU	HEE REEYOU (F S) Flying Dragon.
SHOKAKU	SHO KAH KOO (F F F) Soaring Crane.
ZUIKAKU	ZWEE KAH KOO (F F F) Happy Crane. ("Zui" means everything good—a good omen.)
SHOHO	SHO HO (S S) True (Righteous) Gigantic Bird.
ZUIHO	ZWEE HO (F S) Happy Bird of Paradise. (The bird of paradise is a good omen.)
HIYO	HEE YO (N N) Flying Hawk.
JUNYO	JUNE YO (N N) Obedient Hawk.
RYUHO	REEYOU HO (N S) Dragon and Gigantic Bird.
CH YODA	CHEE YO DAH (N N N) Chiyoda Castle. (Emperor's Castle.)
CHITOSE	CHEE TOE SAY (F F N) Thousand Years. (Longevity.) (As a CVL she survived ten months.)

TAIHO	THAI EE HO (N N S) Gigantic Bird.
SHINANO	SHE NAH NO (N N N) Ancient name for Nagano Prefecture.
UNRYU	OON REE YOU (F N S) Cloud and Dragon.
AMAGI	AH MAH GEE (N N F) (Equal emphasis. Hard "G".) Mountain on Izu Peninsula.
KATSURAGI	KAHT SOO RAH GEE (N N N N) (Equal emphasis. Hard "G".) Mountain bordering Osaka and Nara.

BATTLESHIPS

KONGO	KONG GO (N N) Mountain bordering Osaka and Nara meaning diamond-hard and unbreakable—the hardest metal.
HIEI	HEE AY (N N) ("EI" is pronounced as a hard letter "A".) Mountain northeast of Kyoto City.
HARUNA	HAH ROO NAH (F N N) (Equal emphasis.) A hot springs mountain in Gumma Prefecture.
KIRISHIMA	KEE REE SHE MAH (N N N N) Mountain in Kagoshima Prefecture.
FUSO	WHO SSO (F F) (The "F" is pronounced as an "H". The Japanese do not bite their lips when speaking, I'm told.) Ancient Chinese name for Japan.
YAMASHIRO	YAH MAH SHE RO (N N N N) (Equal emphasis on "YAMA".) The area surrounding Kyoto City.
HYUGA	HEE YOU GAH (N N F) Miyozaki area in northeast Kyushu City.
ISE	EE SAY (F F) An area in Mie Prefecture, central Honshu, noted as the location of the Emperor's ancestor's shrine.
NAGATO	NAH GAH TOE (N N N) Yamaguchi Prefecture at the southern tip of Honshu.
MUTSU	MOOT SEH (N F) ("SU" is pronounced as the last sound of "Tecumseh".) Aomori and Iwate Prefectures.
YAMATO	YAH MAH TOE (N N N) Ancient name for Japan.
MUSASHI	MOO SAH SHEE (N N N) Tokyo and vicinity.

CRUISERS

KAKO	KAH KO (F F) River in Hyogo Prefecture.
FURUTAKA	WHO ROO TAH KAH (N N N N) (Equal emphasis.) Old Hawk.
KINUGASA	KEE NOO GAH SAH (N N N F) (Equal emphasis.) Mountain north of Kyoto City.
AOBA	AH OH BAH (N N N) (Equal emphasis.) A castle in Sendai City.
MYOKO	MEEOH KO (N S) Mountain in Niigata Prefecture.
NACHI	NAH CHEE (N N) Mountain in Wakayama Prefecture.
HAGURO	HAH GOO RO (F N N) Mountain in Yamagata Prefecture.
ASHIGARA	AH SHEE GAH RAH (N N F F) Mountain in Kagagawa Prefecture.
TAKAO	TAH KAH OH (N N N) (Equal emphasis.) A hill in Kyoto City.
ATAGO	AH TAH GO (N N N) Another hill in Kyoto City.
CHOKAI	CHO KHAI (S N) Mountain in Yamagata Prefecture.
MAYA	MY YAH (N N) (Equal emphasis.) Mountain near Kobe City. Also the name of Buddha's mother.
MOGAMI	MO GAH MEE (N N N) River in Yamagata Prefecture.
MIKUMA	MEE KOO MAH (N N N) (Origin unknown.)
SUZUYA	SOO SSOO YAH (F N N) (Prounounce the "Z" as a hissed "S".) Bell Valley.
KUMANO	KOO MAH NO (N N N) (Equal emphasis.) River in Wakayama Prefecture.
TONE	TOE NAY (N F) River in Kanti area.
CHIKUMA	CHEE KOO MAH (F N N) River in Kyushu.
KITAKAMI	KEE TAH GAH MEE (N N N F) (Pronounce the second "K" as a hard "G".) River in Iwate and Miyagi Prefectures.
OI	OH EE (S N) River in Shizuoka Prefecture.

SPECIAL NAVAL LANDING FORCES

YOKOSUKA	YO KOSS KAH (N N F) (The "U" is silent.)
KURE	KOO RAY (N N)
SASEBO	SAH SAY BO (N N F)

SUBMARINES: There were three categories of submarines: I, RO, and HA corresponding to the first three letters of our alphabet. Pronounce EE, ROW, and HAH. ☆

FORTRESS EUROPA SECOND EDITION RULES

The rulebook has been completely reformated from three columns of 8 pt. type to two columns of 10 pt. type. Two OB Charts have been added to aid the setup of the "Battle Of the Bulge" and "On To Berlin" scenarios. The section on Optional Rules has been expanded (to include all the rules that appeared in *THE GENERAL, Vol. 17, No. 4)* and reorganized, and each optional rule now contains a rating to show which side it helps, useful when players feel one player needs a little extra help. The Advanced Air System (also from *THE GENERAL*) is included along with the Advanced Aircraft Mission Chart. The basic rules include all the errata that appeared in *THE GENERAL* as well as some that didn't.

A must for any fan of the game, the Second Edition rulebook of *FORTRESS EUROPA* is only available direct from Avalon Hall, 4517 Harford Rd., Baltimore, MD 21214 for $4.00, plus 10% postage.

DIPLOMACY WORLD

When it comes to multi-player games, *DIPLOMACY* leads the pack and when it comes to *DIPLOMACY,* you can't beat *DIPLOMACY WORLD*! Published since 1974, *DIPLOMACY WORLD* is a magazine devoted to the play of *DIPLOMACY* and its many variants.

DIPLOMACY WORLD will drop into your mailbox quarterly for a mere $6.00 a year (slightly higher outside the U.S. and Canada).

Not sure? A sample copy can be sent to you for only $2.00, and then you can see for yourself. With this sample copy you will get valuable info on the play of the game and the names of postal Gamesmasters so that you can get in on the fun by mail.

Contact *DIPLOMACY WORLD,* "Alcala", 1273 Crest Dr., Encinitas, CA 92024, for your subscription or sample. Or send us a stamped, self-addressed envelope and we'll send you our list of play-by-mail game openings.

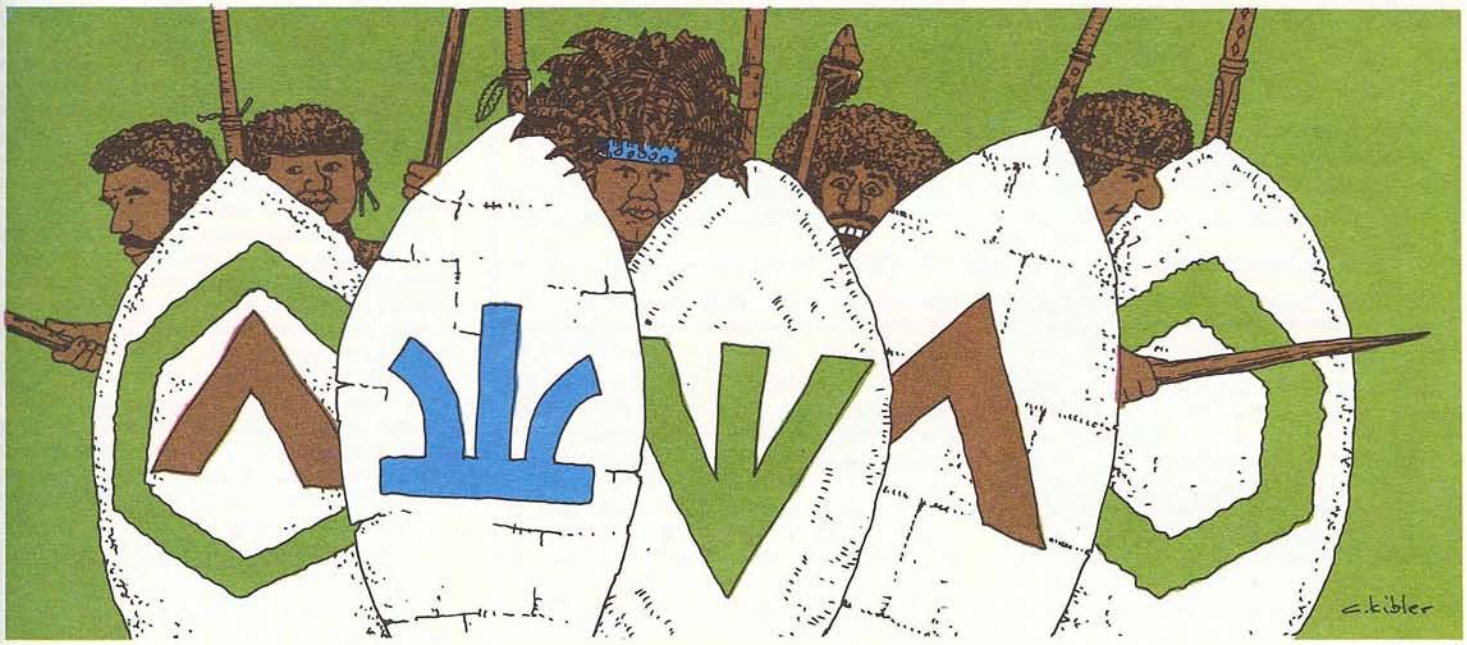
THE AVALON HILL GENERAL & COMPANY INDEX

After dozens of requests for it, we've finally compiled an index for *THE GENERAL*. But what an index! Virtually everything that has appeared in the first 16 volumes of *THE GENERAL* is referenced and cross referenced ad infinitum.

The main subject matter is, of course, a chronological listing of gaming articles by subject matter with specific author, volume, and page references. There is, however, much more including indices for contests, RBGs, philosophies, covers, letters, and miscellaneous articles.

The index also includes a running commentary on the development of the Avalon Hill Game Co. from 1952 to the present. This "Time Line" is a wealth of information for the trivia buff or serious AH devotee and includes a complete listing of Avalon Hill titles in the order of their publication, complete with design/development credit and miscellaneous information.

This 20 page, 8" × 11" booklet is yours for $4.50 plus the usual postage charges direct from Avalon Hill at 4517 Harford Rd., Baltimore, MD 21214. Maryland residents please add 5% state sales tax.



NATIVE POLICY IN SOURCE OF THE NILE

By Michael Anchors

Explorer A has clawed through the rain forest for weeks short of food and ammunition, his expedition reduced to two stalwart *askaris* and a terrified bearer. Durban is just a distant memory, and Luanda an impossible dream. The mud of the Congo sucks at his heels. Pausing to rest, he watches the green river sweeping toward the Atlantic. If only he had a canoe! The *askaris* bring word that a native village lies ahead. The explorer prods the bearer to his feet and leads his party into the midst of the deserted camp. Suddenly, they are surrounded by four divisions of excited savages, beating *asagis* against their shields. The *askaris* close around the explorer and level their muskets. The bearer faints. Tense moment. It occurs to Sir A that the gunpowder may be wet. The native king steps forward out of a clutch of concubines. Sir A clears his throat to speak . . .

Meanwhile, Explorer B is near the beginning of his trek. He leads a large expedition of bearers loaded with rations and little else. Sir B had planned to eat and run, pardon the expression, up the Zambesi to the Atlantic shore. He wanted to avoid the heathens altogether, but now he has stumbled into the burial ground of a proud tribe of plains people. Should he make a peace-offering or ignore the brutes?

Explorer C, known for his ruthlessness, hired *askaris,* known for theirs. His plan was to butcher the first tribe he came to and take what he needed. Two weeks up the Congo, his scouts locate a small tribe of pygmies, and C confidently prepares to attack.

Explorer D is a doctor/missionary. He's looking for natives, too, but with a Higher Purpose in mind. His pack mules are laden with gifts. Encountering a tribe of pestilence ridden herdsmen, he strives to allay the suspicious chief so that his healing work can begin.

Explorer E, a wealthy geologist, equipped a very large expedition with plentiful *askaris* and rations. He had discovered a cataract that may be the highest in Africa. Unfortunately a local band of brigands is determined to expel the intruders.

The Native Policy Table lists six types of policy. Obviously, the above explorers have different policy needs, and we will see that they should select different policies.

NATIVE POLICIES

Policy 1—Expedition remains in hex but goes on the defensive. It may not draw for bonus or hunt this turn. It may not leave this hex until next turn.

Policy 2—Expedition attempts to retreat back to the hex from which it just came. It must immediately retreat without combat if it receives a N or C result on the Native Attitude Table. If ambushed, it undergoes combat and is no longer required to retreat.

Policy 3—Expedition attempts to seek contact with the natives with great caution and a great show of force.

Policy 4—Expedition continues its turn as though the natives were not there.

Policy 5—Expedition approaches the natives in an open and friendly manner.

Policy 6—Expedition approaches the natives in an open and friendly manner with a great display of technology. This policy can only be selected if three or more hexes from a port or another tribe not discovered this turn.

After an explorer who has encountered natives selects a native policy, he rolls on the Native Attitude Table. If the result is Neutral, he may retreat, negotiate or peacefully coexist with the natives depending on the policy selected. If the result is (natives) Charge, the wicket gets sticky. If the result is Ambush, the wicket positively won't let go!

Before discussing negotiations, we have to take a look at those Charges and Ambushes to find out what's at stake or more directly perhaps, who's at the stake. If a C is rolled on the Native Attitude Table, the explorer consults the Charge Table. See Table 1. An H result means the natives hide. D means the explorer is defeated; W means the explorer wins. S, M and L refer to the size of the native tribe: small, medium or large.

There are some trends in Table 1. First, the obvious one: the chance of avoiding defeat (= H + W) increases with increasing number of *askaris* and decreasing size of the tribe. More interestingly, while decreasing the number of *askaris* always increases the probability of a D result,

Table 1. Probability of various results on the Charge Table

CHARGE TABLE PROBABILITIES

# muskets	1			2			3			4			5			6			7			8			9+		
	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
D	92*	100	100	64	82	92	44	61	73	28	47	64	17	34	55	8	17	48	3	17	36	0	11	28	0	6	22
H	8	0	0	19	6	0	31	17	6	39	22	14	50	33	17	61	47	19	69	53	22	83	53	25	92	61	31
W	0	0	0	17	13	8	25	22	21	33	31	22	33	33	28	31	36	33	28	36	42	17	36	47	8	33	47
H + W	8	0	0	36	18	8	56	39	27	72	53	36	83	66	45	92	83	52	97	89	64	100	89	72	100	94	78

* per cent probability

muskets = # of *askaris* + explorer, if he has a musket.

AMBUSH TABLE PROBABILITIES

# muskets	1			2			3			4			5			6			7			8			9+		
	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
D	94	94	94	78	97	100	60	84	97	56	72	94	42	58	92	31	55	86	42	47	83	33	44	72	17	41	58
H	6	6	6	11	3	0	18	8	3	19	11	6	25	17	8	30	20	11	41	25	11	42	28	14	52	31	28
W	0	0	0	11	0	0	22	8	0	25	17	0	33	25	0	39	25	3	17	28	6	25	28	14	35	28	14
Ambush																											
H + W	6	6	6	22	3	0	47	16	3	44	28	6	58	42	8	70	45	14	59	53	17	67	56	28	87	59	42
Charge																											
H + W	8	0	0	36	18	8	56	39	27	72	53	36	83	66	45	92	83	52	97	89	64	100	89	72	100	94	78

Table 2. Probability of various results on the Ambush Table

increasing the number of *askaris* does not always increase the chance of a W result. Depending on the size of the tribe, there is a point at which increasing the number of *askaris* actually decreases the chance of a W, because the natives prefer to hide. For a small tribe, the breaking point is four muskets; for a medium tribe, six; and for a large tribe, eight. Consequently, explorer C who designs to defeat native tribes rather than merely avoid them should refrain from hiring too many *askaris,* and he'll have his best luck attacking the larger tribes. Explorer B who wanted to avoid the natives would have profited from hiring some *askaris* to compel the smaller tribes to hide.

But natives don't always charge or hide; sometimes the buggers lay ambushes. Egad! Check Table 2.

Unless the expedition mounts only one musket, i.e. no *askaris* or *askari* plus musketless explorer, the chance of avoiding defeat (= H + W) is considerably less in an ambush than in a charge. That figures. The same trends we saw in the Charge Table apply to the Ambush Table as well, with a few exceptions. As the number of *askaris* increases, the chance of defeating a small tribe does increase until a break-even point is reached at six muskets (compared to four for a charge). But there is no break-even point for medium or large tribes: more *askaris* always help.

Small tribes behave rather peculiarly in ambushes. They have a 42% chance of defeating an expedition with five *or* seven muskets, but only 31% chance of defeating six! Moreover, the explorer will get a W result 39% of the time with six muskets, but only 17% with seven!! These anomalies occur because in the range of 5-7 muskets, small tribes go into hiding more often, and in the range of 6-9+ muskets, they tend to be defeated before they can hide. A consequence of this paradox is that the explorer ambushed by a small tribe has a better chance to avoid defeat with six muskets than with any other number of muskets less than nine.

What happens when the explorer wins? He rolls on Table A of the Results of Victory Table to determine how many *askaris* were lost. The expected loss from fighting a small tribe is 0.83 *askaris*; for a medium tribe, 1.51; and for a large tribe 2.36. The maximum losses of *askaris* are four, five and six respectively. If Table A calls for more *askaris* to be lost than the explorer has, the thrill of victory becomes the agony of defeat.

The victorious explorer then rolls on Table B of the Results of Victory Table to determine how many natives were captured. For anyone who is interested, the expected tally of prisoners is equal to two plus the number of surviving *askaris* divided by twelve. Prisoners can be used as bearers; they're not fit for guide or *askari* work. The main advantage of winning a battle, other than survival, is getting to loot the native village. The explorer may find the village if the number rolled on Table B had an asterisk. He actually finds it if he then rolls on one die a number equal to or less than the number of the policy he selected. For instance, if policy #6 was selected, there is an overall probability of 50% to find the village. The looting explorer rolls one die for a small tribe, two for medium and three for large, and doubles the sum. The product is the number of looting die rolls available to the explorer. On the Looting Table, rolls of 1-4 confer 1-4 rations, 5 a gift and 6 a camel (in desert) or a canoe (on a river). The average haul from a small tribe would include ten rations, one gift and one camel or canoe. A medium tribe would double that and a large tribe would triple it.

What about the Consequences of Defeat? There's a table for that, too. The unlucky explorer has an 8% chance of being killed outright, a 20% chance of being captured and held prisoner and a 72% chance of escaping alone or with some members of the expedition. If captured, the intrepid explorer can try to escape by rolling on the same table. It's impossible to calculate an overall probability of explorer-survival, since it depends on surrounding terrain, distance from a port, etc., but it's obvious that a defeated explorer is in hot water. Of course, the player who owns the explorer can abandon the wretch to his fate and start a new explorer in Europe, but the player's chance to win the game is significantly compromised by each defeat.

Table 3. Probability of Tribe becoming friendly

# gifts	prob	# gifts	prob
1	3%	6	58%
2	8	7	72
3	17	8	83
4	28	9	92
5	42	10+	97
		All	100

Now that we've dealt with slings and arrows of outrageous fortune, let's consider negotiations. The principle is simple: the more gifts the explorer offers, the more likely the tribe is to become friendly. The size of the tribe doesn't matter, I guess, because the gifts are for one guy, the chief. The explorer rolls on the Negotiation Table and finds the result in the column below the number of his gifts.

'All' refers to giving every gift, ration and artifact the explorer carries, including nothing if that's all he's got. It is worth a lot to make the chief happy because the alternative to a Friendly result is a particularly nasty kind of ambush in which the natives are barred from hiding. On the other hand, if an explorer gives every chief he meets ten gifts, he may run out of gifts before he meets the last tribe. Consequently, if the explorer has a reasonable number of *askaris,* he might be stingy with the chief of a small tribe, but he'd be inclined to impress the King of the Zulus. And an explorer with a lot of gifts or a few *askaris* should be very generous.

Finally, we are ready to tackle the central dilemma: what policy to choose. Table 4 shows the probability of a Neutral, Charge or Ambush result for each policy on the Native Attitude Table, taking into account the expedition's activity level for the turn, i.e. Cautious, Normal or Reckless.

The trends in the table are pretty uniform. as the number of the policy increases, the chance of a Neutral result increases. As the activity level goes from Cautious to Reckless, the probability of Ambush increases compared to that of a Charge. That all makes sense. Now let's consider each policy individually.

Policy #1. Defensive. This policy minimizes the threat of an Ambush, but virtually guarantees the natives will charge. That might be a worthwhile trade-off for the explorer with enough *askaris.* A key advantage of policy #1 is that the explorer gets to stay in the hex. One big disadvantage is that the expedition may not draw for bonus, hunt or move farther in the turn.

Policy #2. Retreat. With this policy the explorer who can't survive a charge, can flee. The advantage is survival. The disadvantage is being forced out of the hex. Both policies #1 and #2 are rather insensitive to activity level. If an explorer has been reckless and run into natives, policy #1 or #2 may be the best remedy.

Policy #3. Show of Force. An N result both permits and compels the explorer to negotiate, although the chance of an N result with this policy is the least of the three policies (3, 5 and 6) that can lead to negotiations. The natives prefer to fight instead. The advantage of policy #3 over #5 and #6 is that it minimizes the chance of Ambush. But the degree of this advantage over policy #6 is small compared to the increased chance of negotiations with policies #5 and #6.

Policy #4. Ignore the Natives. This policy does not require the explorer to negotiate and does permit the expedition to remain in the hex and hunt. An N result here means that expedition and natives peacefully coexist. Policy #4 is better than policy #1 in that the natives attack less often, 61% compared to 92%. The disadvantage is that the natives are prone to ambush more often. The problem gets really serious if the expedition was reckless, a 33% chance of ambush.

Policy #5. Friendly Approach. This policy has no advantage over #6 for the explorer bent on negotiations, and little advantage over #3 for the explorer who can't stand an ambush. It does have the minor advantage that, if combat is in the cards, the explorer has a greater chance to find the native village, 42% chance on Table B vs. 25% for policy #3. Policy #5 is most often used by explorers who would prefer policy #6, but are barred from select-

Table 4. Probability of various results on the Native Attitude Table

NATIVE ATTITUDE PROBABILITIES

Policy #	1			2**			3*			4			5*			6*		
Activity Level	C	N	R	C	N	R	C	N	R	C	N	R	C	N	R	C	N	R
Neutral	8	8	8	19	19	19	25	25	25	39	39	39	50	50	50	64	64	64
Charge	92	92	89	81	78	76	72	67	58	53	47	28	42	33	8	28	22	14
Ambush	0	0	3	0	3	5	3	8	17	8	14	33	8	17	42	8	14	22

**a C or N result with this policy requires explorer to retreat.
*an N result with this policy requires explorer to negotiate.

ing #6, because they are too close to a port or encountered natives earlier in the turn.

Policy #6. Display of Technology. This policy may only be selected when three or more hexes from a port and another tribe was not discovered in the same turn. Policy #6 offers the best chance for negotiations, with a risk of ambush only slightly greater than policy #3. Of course, no one would dare choosing policy #6 without enough gifts to appease the chief. I find it interesting that policy #5 has a much greater risk of ambush than policy #6. It suggests that native tribes familiar with white man's ways, either by proximity to a port or by hearsay from adjacent tribes, would be less impressed by a display of technology and more disposed to ambush the technicians.

How about our original examples? The policy decision of explorer A should depend on what the bearer is carrying, gifts or rations, and the distance and terrain between the explorer and the nearest port. If Sir A can manage without the natives, his wisest course would have been to flee with policy #2, or policy #4 if he could not afford to leave the hex. If that bearer has some gifts, Sir A could even try policy #6, offering the chief some gifts and keeping a few to trade for a canoe.

Explorer B made a mistake by not hiring at least some *askaris.* Now he'll have to flee with policy #2 or try to stay in the hex with policy #4.

Explorer C should choose policy #4. He wants the blessed pygmies to charge. He needs to choose a policy with a high number so that he can find the pygmy village. If he's loaded with *askaris,* he might even choose policy #5 or #6. Then, if he has to negotiate, he can offer the chief no gifts or one gift with a 97% chance the insulted pygmies will ambush him.

Our saintly explorer D should choose policy #6, and with so many gifts the herdsmen will certainly become friendly. If he's too close to port or discovered another tribe this turn, he could choose policy #2 to avoid the natives or risk policy #5.

Explorer E should choose policy #1, since he wants to map the cataract. He can feed his expedition from the rations he brought with him, and he has the *askari* power to turn back the brigands' charge.

That's about all I had to say. If you can keep your head when all about you are losing theirs then you, my son, have mastered native policy in *SOURCE OF THE NILE.*

Any comments or questions should be directed to Michael Anchors, 2024 Walnut St., Durham, NC 27705.

☆

BUMPER STICKERS

Now you can proclaim your gaming status to one and all with bumper stickers from Avalon Hill. Select from any of the following:

WARNING: Avalon Hill Game Thinkers! Brain Engaged!

CAUTION: I stop at Avalon Hill Game Stores.

I break for Avalon Hill Games.

Follow Me! I Play SQUAD LEADER

WANTED: Opponents for Avalon Hill Games.

Candy might be dandy, but Avalon Hill Games Don't Rot Your Teeth.

The bumper sticker(s) of your choice are available from The Avalon Hill Game Company, 4517 Harford Rd., Baltimore, MD 21214 for $1.00 each plus 10% for postage and handling (Canadians 20%, Overseas 30%). MD residents please add 5% state sales tax.

MORE OPTIONS . . . *Continued from Page 17*

e. SST: Gunnery Factor—0, AAF—1, MF—1, Damage Factor—1, Mine Factors—0, Torpedoes—1, Victory Points—8.

2. Japanese.

a. DM: Gunnery Factor—1, AAF—1, MF—2, Damage Factor—2, Mine Factors—2, Torpedoes—2, Victory Points—10.

b. ML: Gunnery Factor—0, AAF—1, MF—1, Damage Factor—1, Mine Factors—1, Torpedoes—0, Victory Points—8.

c. MS: Gunnery Factor—0, AAF—1, MF—1, Damage Factor—1, Mine Factors—0, Torpedoes—0, Victory Points—6.

d. SSM: Gunnery Factor—1, AAF—1, MF—1, Damage Factor—1, Mine Factors—1, Torpedoes—2, Victory Points—10.

e. SST: Gunnery Factor—0, AAF—1, MF—1, Damage Factor—1, Mine Factors—0, Torpedoes—1, Victory Points—8.

☆

BRITISH FLAT TOPS . . . *Cont'd from Page 20*

Air Groups

Indomitable, August 1942
2 Marlets
8 Sea Hurricanes
8 Albacores
18 Total

Illustrious, May 1942
2 Marlets
6 Seafires
8 Swordfish
16 Total

Victorious, August 1942
2 Sea Hurricanes
6 Fulmars
8 Albacores
16 Total

(These airgroups were the actual ones on the carriers at the time stated. It is probable that the composition would have been different had the British expected to duel Japanese carriers. It is recommended that the British player experiment with different airgroups.)

☆

TABLE D

Name	Type	Gunnery Factor	Anti-Aircraft Factor	Movement Factor	Damage Factor
Illustrious	(CV)	1	6	2	7
Indomitable	(CV)	1	7	2	7
Victorious	(CV)	1	6	2	7
KG V	(BB)	20	5	2	16
Anson	(BB)	20	6	2	16
London	(CA)	4	2	2	5
Manchester	(CA)	4	1	2	5
Berwick	(CA)	4	1	2	5
Kent	(CA)	4	1	2	5
Suffolk	(CA)	4	1	2	5
Shropshire	(CA)	4	1	2	5
Australia	(CA)	4	1	2	5
Dido	(CL)	2	2	2	4
Euraylis	(CL)	2	2	2	4
Sirius	(CL)	2	2	2	4
Pheobe	(CL)	2	2	2	4

SERIES 100
CROSS OF IRON SCENARIOS

SERIES 100 is a pad of ten new scenarios for *CROSS OF IRON* printed on the same index stock and in the same style used for both *SQUAD LEADER* and *CROSS OF IRON.* These scenarios were designed by *COI* playtester Courtney Allen and playtested by members of his Interest Group San Francisco playtest group. Afterwards, they were retested by other regional groups of the *COI* playtest team—most notably Jon Mishcon, Joe Suchar, and John Kenower who contributed greatly to their final evolution. For those disdaining the "design your own" approach, here is your chance to experience more *COI* scenarios which have been tested for balance and constitute top quality playing aids. Now is the chance to employ more of those special armor units provided with *COI* which don't see action in any of the official scenarios.

The ten scenarios comprising SERIES 100 are titled as follows: BLOCKING ACTION AT LIPKI (1941), SLAMMING OF THE DOOR (1941), BALD HILL (1941), THE PENETRATION OF ROSTOV (1942), NIGHT BATTLE AT NOROMARYEVKA (1943), BEACHHEAD AT OZEREYKA BAY (1943), DISASTER ON THE DNIEPER LOOP (1943), BLOCK BUSTING IN BOKRUISK (1944), COUNTER-ATTACK ON THE VISTULA (1944), THE AGONY OF DOOM (1945).

SERIES 100 is available by mail only from Avalon Hill for $4.00 plus usual postage charges. Maryland residents please add 5% state sales tax.

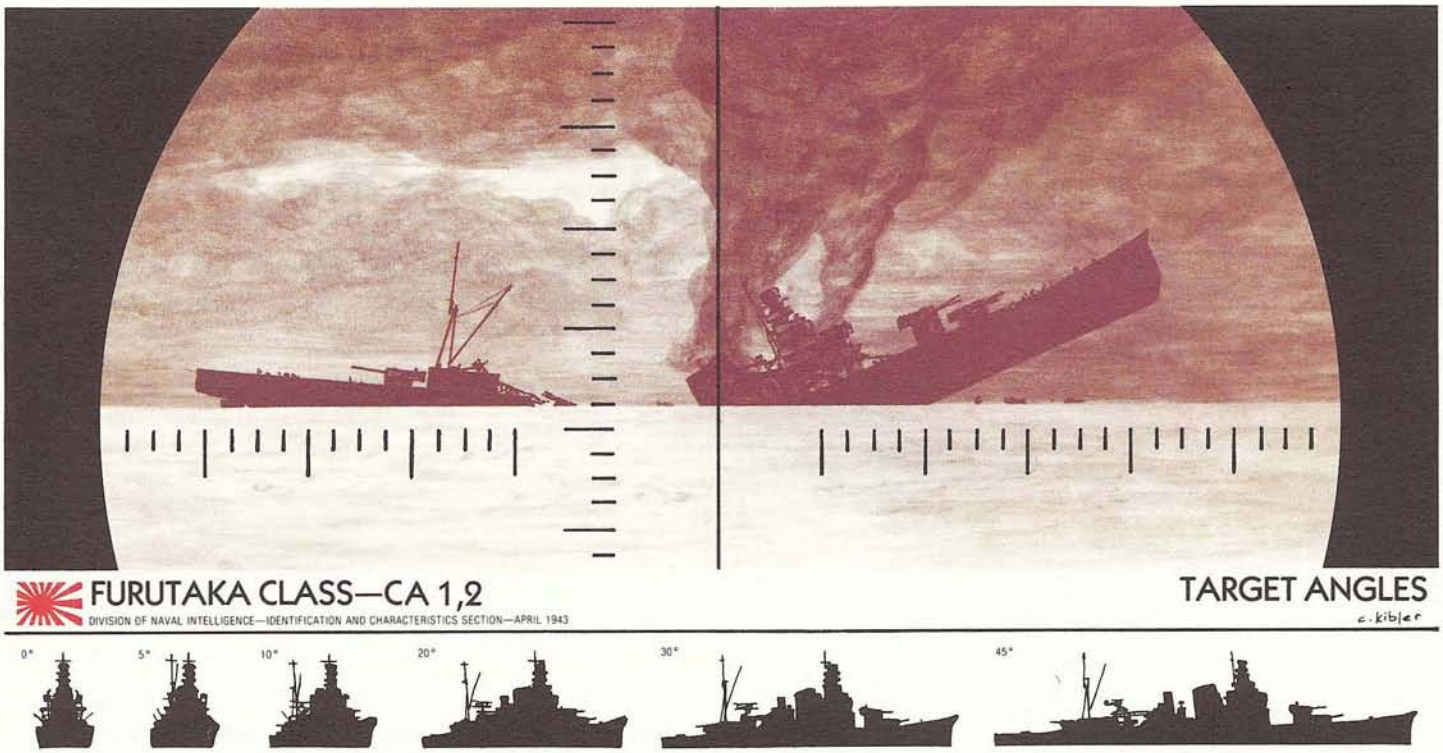
SERIES 200
CRESCENDO OF DOOM SCENARIOS

SERIES 200 is a pad of ten new scenarios for *CRESCENDO OF DOOM* printed on the same index stock and in the same style used for *SQUAD LEADER* and its gamettes. These scenarios were designed by *COI* & *COD* developer Courtney Allen and playtested by several of the *SL* playtest groups who play so important a role in the continuing development of the game system.

For those disdaining the "design your own" approach, here is your chance to experience more *COD* scenarios which have been tested for balance and constitute top quality playing aids. Here is the chance to employ more of those special armor units provided with *COD* which don't see action in any of the gamette's scenarios.

The ten scenarios comprising *SERIES 200* are titled as follows: UNDER COVER OF DARKNESS (1939), BITTER DEFENSE AT OTTA (1940), SACRIFICE OF POLISH ARMOR (1939), CHANCE D'une AFFAIRE (1940), LAST DEFENSE LINE (1940), FIGHTING AT WORLD'S EDGE (1940), THE FRENCH PERIMETER (1940), ROAD TO KOZANI PASS (1941), THE AKROIRI PENINSULA DEFENSE (1941), COMMANDO RAID AT DIEPPE (1942).

SERIES 200 is available by mail from Avalon Hill for $4.00 plus usual postage charges. Maryland residents please add 5% state sales tax.



FLEET BOAT

AMERICAN PACIFIC OPERATIONS FOR SUBMARINE

By Richard A. Strangman

Being an island nation, Japan was dependent on imports. To supply the homeland with the needs of a modern industrial power, Japan had built up a sizable merchant fleet of some six million tons by 1940; and the coveted southwest Pacific was rich in the raw materials necessary for Japan to fight a protracted war with the Western powers. The sole difficulty lay in getting these raw materials from the point of production to the Home Islands. If the American fleet were out of action, however, the Imperial Navy seemed invincible—and the sea lanes would be open to the merchant fleets of the Emperor.

In the final briefing before the attack on Pearl Harbor, the Japanese airmen were instructed to concentrate on the airfields of the Hawaiian islands and the capital ships of the U.S. Seventh Fleet. Destroy the American surface fleet and the Japanese would dominate the waters of the South Pacific. But because the Japanese submarine force did not figure prominently in the master plan of conquest, the American submarine fleet was dismissed by Japanese strategists as little more than a temporary nuisance. Therefore, despite being forced from the Philippines to bases in Australia and Hawaii, the American submarine force remained virtually intact during the dark days of Japanese victory. And, less than four years later, due in large part to the efforts of the American submariners, all that remained afloat of Japan's seagoing merchant caravans was 300,000 tons of battered shipping.

For some little time, the only significant offensive punch for the Allies in the Pacific was the submarine. The first Japanese aircraft to be shot down in combat was credited to a submarine at Pearl Harbor. And some 500,000 tons of enemy warships fell to the American submarines ranging the Pacific theater. American operations in the Pacific represent the most successful and implacable submarine campaign in the annals of naval warfare.

Initially, the American efforts were plagued by torpedo failure. The Mark XIV with the magnetic detonator ran deeper than set, missing many tempting targets. And the Mark XIV contact detonator failed too often in crucial situations. As these technical faults were overcome, the scores against the Japanese merchant marine and the Imperial Navy mounted rapidly. By war's end, the American submariners could claim a stupendous tonnage figure, 5.3 million, representing almost 55% of all Japanese vessels lost.

As the technical aspects improved, many U.S. commanders returned to port with brooms lashed to their mastheads signifying a "clean sweep" or, in other words, a profitable patrol. Many of these men, individualistic and daring, became noted for exploits. Men such as Sam Dealy, nicknamed "The Destroyer Killer" in his boat the *Harder*, and Lawson P. "Red" Ramage (who won the Congressional Medal of Honor for his surface attack on a Japanese convoy) in *Parche*, and Dick O'Kane of the *Tang* who was sunk by his own final torpedo, and Dudley "Mush" Morton, became legends in the American press to the home folk beset by reports of American disasters on the high seas.

With Avalon Hill's SUBMARINE game, any submarine action of World War II can be recreated. This article introduces a series of scenarios depicting famous exploits by famous American commanders in the Pacific theater. And hopefully will lead to an appreciation of these stalwart men in their "underwater coffins" fighting a grim war of their own.

SCENARIO P1
"THE DESTROYER KILLER"

I. Introduction

On the night of 6 June 1944, the *USS Harder* entered the Sibutu Passage, the narrow strait which separated the northeast corner of Borneo from the large Japanese naval base of Tawi Tawi. Her skipper was the legendary Lieutenant Commander Samuel D. Dealy of Dallas Texas, a Congressional Medal of Honor winner, who subsequently lost his life in an ill-fated attack on a Japanese convoy. For two days he patrolled the straits, hounded by enemy destroyers; finally, in a night action that would make him famous, Dealy struck back.

II. Order of Battle

1. American Player—*Harder,* Class Gato
2. Japanese Player—*Shimikaze,* Class Shimikaze
   Kamikaze, Class Kamikaze

III. Starting Location

1. *Harder*—X31, Bd A, Dir. 1
2. *Shimikaze*—Q24, Bd B, Dir. 5
   Kamikaze—Q39, Bd B, Dir. 5

IV. Victory Conditions

The American player must sink both destroyers to win. The Japanese player must sink the *Harder* to win. Any other result is a draw.

V. Game Length

28 turns, Night Scenario

VI. Special Rules

In order for the American player to have an even chance of winning, rule 39. of the Advanced Game will be used in place of rule 13.8 of the Basic Game. This rule simulates the short range "down the throat" shots which many sub commanders used to stop a rampaging Japanese destroyer bent on "deep-sixing" their boat.

SCENARIO P2
S-44 AGAINST CRUISER DIVISION 6

I. Introduction

Mikawa had turned his elite Cruiser Division 6 for Kavieng harbor after his victory in the waters of Savo Island. But Mikawa was not to escape unscathed. Submarine S-44 was on patrol off the coast of New Ireland the following morning of 10 August 1942 and as the homebound task force passed close aboard, Lieutenant Commander John R. "Dinty" Moore fired a spread of torpedoes at the cruiser *Kako.* In five minutes she broke up and went down, as Moore coaxed his slow, noisy boat away from the enraged enemy destroyers.

II. Order of Battle

1. American Player—S-44, Class Old "S"
2. Japanese Player—*Kako,* Class Kako
   Furutaka, Class Kako
   Aoba, Class Kako
   Kinugasa, Class Kako

III. Starting Location

1. S-44—N18, Bd A, Dir. 6
2. *Kako*—G54, Bd B, Dir. 6
   Furutaka—G47, Bd B, Dir. 6
   Aoba—Q54, Bd B, Dir. 6
   Kinugasa—Q47, Bd B, Dir. 6

IV. Victory Conditions

The American player must sink any one Japanese cruiser before the cruisers can exit. The Japanese player must exit four cruisers off Bd B, side 1. Any other result is a draw.

V. Game Length

20 turns, Day Scenario

VI. Special Rules

Rule 39.0 must be used in place of rule 13.8.

Ship Data Chart for the Japanese cruisers, Class Kako should read as follows:

ID	TYPE	CLASS	DEF	SPEED	DMGE
C34	CA	Kako	4	6	18

FWD	BDE	AFT	VP	AVAIL
13	26	13	13	1941

SCENARIO P3
FLASHER AND THE TANKER FLEET

I. Introduction

After having pursued a tempting tanker convoy fruitlessly during the morning of 22 December 1944, having lost it as the enemy pulled away in heavy seas, George Grider had turned the *Flasher* toward Camranh Bay. But, suddenly, his radar picked up the enemy ships, close ashore, slowing in the heavy swell. In one of the most daring attacks of the war, Grider eased his boat into shallow water between the convoy and shore. As the sub chasers scrambled over the sea, frantically searching for his sub, Grider sank three laden tankers. This was to be the first of many "clean sweeps" for Grider. By the end of the war, every tanker—the favorite target of U.S. submarines—of Japan's once proud merchant fleet lay on the ocean floor; George Grider accounted for many of them.

II. Order of Battle

1. American Player—*Flasher,* Class Gato
2. Japanese Player—5—T3 Tankers
   Kamikaze, Class Kamikaze
   Kaikoben #15, Class Kaikoben I
   Kaikoben #27, Class Kaikoben I
   Kaikoben #4, Class Kaikoben II

III. Starting Location

1. *Flasher*—K1, Bd C, Dir. 2
2. T3 Tanker—E15, Bd B, Dir. 2
   T3 Tanker—X12, Bd A, Dir. 2
   T3 Tanker—Q8, Bd A, Dir. 2
   T3 Tanker—J5, Bd A, Dir. 2
   T3 Tanker—C1, Bd A, Dir. 2
   Kamikaze—A19, Bd B, Dir. 2
   Kaikoben #13—R15, Bd A, Dir. 2
   Kaikoben #27—K11, Bd A, Dir. 2
   Kaikoben #4—C7, Bd A, Dir. 2
   All tankers are in a slow convoy.

IV. Victory Conditions

The American Player must sink three tankers to win. Any other result is a Japanese victory.

V. Game Length

46 turns, Day Scenario

SCENARIO P4
PARCHE AND STEELHEAD vs. ALL HELL

I. Introduction

When the American submariners adopted the German wolfpack tactics, the undersea war entered a new phase in the Pacific. But in a night action off Formosa, CMDR Lawson Ramage in the *Parche* proved that the submarine commanders remained brilliant individualists. Following an attack by Dave Whelchel's *Steelhead,* he cleared the bridge of all personnel except himself and steamed right into the confused convoy on the surface, maneuvering among the ships and firing nineteen torpedoes. Japanese ships fired back with deck guns and tried to ram. With consumate skill and coolness under fire, "Red" Ramage dodged and twisted, withdrawing to submerge. As the *Parche* drew away, Whelchel returned to the attack but was subjected to a furious depth-charging by the escorts. Upon return to Pearl Harbor, Ramage was recommended, and awarded, the Congressional Medal of Honor.

II. Order of Battle

1. American Player—*Parche,* Class Gato
   Steelhead, Class Gato
2. Japanese Player—5-C2 Merchantmen
   2-C3 Merchantmen
   3-T2 Tankers
   Kaikoben #15, Class Kaikoben I
   Kaikoben #27, Class Kaikoben I
   Kaikoben #4, Class Kaikoben II
   Kaikoben #36, Class Kaikoben II
   Kamikaze, Class Kamikaze
   Asanagi, Class Kamikaze

III. Starting Location

1. *Parche*—G47, Bd B, Dir. 1
   Steelhead—P15, Bd B, Dir. 3
2. C2 Merchantman—V57, Bd C, Dir. 5
   C2 Merchantman—V49, Bd C, Dir. 5
   C2 Merchantman—V41, Bd C, Dir. 5
   C2 Merchantman—H42, Bd C, Dir. 5
   C2 Merchantman—H50, Bd C, Dir. 5
   C3 Merchantman—H34, Bd C, Dir. 5
   C3 Merchantman—A38, Bd C, Dir. 5
   T2 Tanker—O53, Bd C, Dir. 5
   T2 Tanker—O45, Bd C, Dir. 5
   T2 Tanker—O37, Bd C, Dir. 5
   Kaikoben #15—W36, Bd C, Dir. 5
   Kaikoben #27—G53, Bd C, Dir. 5
   Kaikoben #4—N32, Bd C, Dir. 5
   Kaikoben #36—O57, Bd C, Dir. 5
   Kamikaze—U28, Bd B, Dir. 5
   Asanagi—U44, Bd B, Dir. 5
   All merchantmen are in a slow convoy.

IV. Victory Conditions

The American Player must sink any five Japanese merchant ships to win. Any other result is a Japanese victory.

V. Game Length

46 turns, Night Scenario

Special Rules

The *Steelhead* must remain in Zone III on Bd B. (Although *Steelhead* did play a major role in this action, her commander did not take her into the close proximity that *Parche's* Ramage did.)

SCENARIO P5
BARB vs. THE ESCORT CONVOY

I. Introduction

On 16 September 1944, while moving at all speed to rescue Allied survivors of a torpedoed Japanese POW transport, Eugene Fluckey in the *Barb* and Charles E. Loughlin in the *Queenfish* chanced upon a northbound convoy. Twenty minutes after Loughlin had expended his last four torpedoes to scramble the convoy escort, Fluckey moved in. Excited at spotting a "flat top", he fired a continuous salvo of six torpedoes. In a matter of moments, two had hit a tanker and three had found the 20000-ton *Unyo,* an escort carrier. In one famous salvo—no one before or since has sunk two large ships with one shot—*Barb* had destroyed 31000 tons of enemy seapower.

II. Order of Battle

1. American Player—*Barb,* Class Gato
2. Japanese Player—3-C2 Merchantmen
   1-T2 Tanker
   Unyo, Class Taiyo
   Shimikaze, Class Shimikaze
   SC #29, Class Sub Chaser #28
   SC #43, Class Sub Chaser #28

III. Starting Location

1. *Barb*—K24, Bd A, Dir. 2
2. C2 Merchantman—P50, Bd C, Dir. 5
   C2 Merchantman—P34, Bd C, Dir. 5
   C2 Merchantman—Y38, Bd C, Dir. 5
   T2 Tanker—Y54, Bd C, Dir. 5
   Unyo—U44, Bd C, Dir. 5
   Shimikaze—L41, Bd C, Dir. 5
   SC #29—U30, Bd C, Dir. 5
   SC #43—S55, Bd C, Dir. 5

IV. Victory Conditions

The American Player must sink the *Unyo* and either the tanker or any other two ships to win. Any other result is a Japanese victory.

V. Game Length

30 turns, Night Scenario

VI. Special Rules

Ship Data Chart for *Unyo* will read as follows:

ID	TYPE	CLASS	DEF	SPEED	DMGE
C27	CVE	Taiyo	4	6	40

FWD	BDE	AFT	VP	AVAIL
10	20	10	40	1941

SCENARIO P6
REDFISH CATCHES THE UNRYU

I. Introduction

With two sister boats, *Redfish* was strung across the projected path of a southbound enemy task force in the Formosa Strait. On the afternoon of 19 December 1944, amid worsening weather conditions, "Sandy" McGregor spotted the Japanese force—a brand-new carrier and her escorts. McGregor closed to within 2000 yards and fired four torpedoes at near point-blank range. One struck the huge target, bringing her to a halt. Avoiding the enemy escorts, he calmly put another torpedo into the crippled carrier. the escorts now homed in on the *Redfish* in a fury, and McGregor hastily ordered his boat down to 200 feet. Despite this, the *Redfish* was severely battered. McGregor was unaware of the success of his mission or of the identity of his target until his return to Midway, where he received full credit for sinking the *Unryu.*

II. Order of Battle

1. American Player—*Redfish,* Class Gato
2. Japanese Player—*Unryu,* Class Unryu
   Yugure, Class Etorufu
   Ikazuchi, Class Shimikaze

III. Starting Location

1. *Redfish*—D18, Bd B, Dir. 2
2. *Unryu*—N41, Bd B, Dir. 6
   Yugure—U41, Bd B, Dir. 6
   Ikazuchi—G41, Bd B, Dir. 6

IV. Victory Conditions

The American Player must sink *Unryu* to win. The Japanese Player must sink *Redfish* to win. any other result is a draw.

V. Game Length

28 turns, Day Scenario

VI. Special Rules

Ship Data Chart for *Unryu* will read as follows:

ID	TYPE	CLASS	DEF	SPEED	DMGE
C31	CV	Unryu	4	6	40

FWD	BDE	AFT	VP	AVAIL
15	20	10	40	SP 44

BLITZ IN THE PACIFIC

OR VICTORY IN THE KRIEG

By Jim Stahler

Jim Stahler shows us how to combine two radically different game systems, the classic hexagon/zone of control system of land warfare found in BLITZKRIEG, and the area system of naval warfare used in VICTORY IN THE PACIFIC, to create a game in which tanks and troops, cruisers and carriers, battleships and bombers, all make their contribution to victory. But this article is much more. It also presents a simple way to introduce the fog of war into BLITZKRIEG via Inverted Units, a more realistic method to handle Guerrilla Warfare, and a manner to assign specific missions to forces in combat using a Mission Matrix combat results system.

INVERTED UNITS

"Peek-a-boo, We Blast You"

I can still remember my excitement fifteen years ago when I first got *BLITZKRIEG*. Not only was it the biggest game that I had ever seen, it was also full of innovations—factor loss, air power, sea movement, and neutral countries. As time went on, the state of the art advanced and certain deficiencies in *BLITZKRIEG* became apparent. Most of these were corrected in the 1975 revision of the game. One problem of the original *BLITZKRIEG* is a lack of the fog of war. This is a deficiency common to most wargames, but the advertisements for *BLITZKRIEG* '75 promised that rules for hidden units were to be included. As it turned out, rules for hidden units were themselves hidden, and published somewhat later ("The Rest of *BLITZKRIEG*" by Dave Robert, Vol. 12, No. 5, Jan-Feb 1976). This rule struck me as artificial and not really what I had expected. Possibly the most realistic approach involves using separate mapboards and pieces, with a moderator telling each player when his units come into contact with the enemy. Since this is not practical for most gamers, I have developed a much simpler system based on the Inverted Counters rule used in *1776*. Units are hidden by inverting them face down on the mapboard. There is no need to write anything down or to use index cards or blank units. It is convenient to color the backs of the counters of one side or the other, or both, to easily identify which inverted unit belongs to whom. Unlike the other rules presented in this article, the *Inverted Units Rule* works well in the Basic Game. Ignore all references to units or rules not being used.

Inverting Units

Ground units may be inverted (turned face down) to hide their type and strength from the opposing player. Only ground units may be inverted; air units may never be inverted. Ground units may start the game inverted, and reinforcements and replacements may enter the game inverted. Face-up ground units may be inverted at the start of their movement phase provided:

1. They are not in the Zone of Control (ZOC) of an enemy unit or unreduced hostile minor country city.

2. They are not in the ZOC of any enemy patrolling/interdicting FTR or TAC (33.7).

3. They are not in the enemy home country. Ground units at sea may always be inverted.

Properties of Inverted Units

Inverted units may not be examined by the enemy player. They retain their movement and combat factors, but inverted units have only infantry-type ZOCs. Since inverting units is voluntary, an armor-type unit may wish to remain face-up to retain its ZOC. Inverted units may stack with face-up units. An inverted unit being attacked on the Barrage and Bombing Table (BBT) has its factors doubled as if it were defending in a city or mountain hex. It gets no additional benefit if inverted and also defending in a city or mountain. If a stack containing both inverted and face-up units is attacked on the BBT, all the face-up units must be eliminated before losses are taken from inverted units.

The attacker has only one chance to get an automatic victory against a stack containing inverted units. He first moves units adjacent to the defending stack and then announces that he is trying to AV that stack. The defender informs him if he has sufficient strength. If he does, an automatic victory situation occurs (21.). If the attacker does not have enough combat factors to achieve an automatic victory, no AV may be made against that stack in that turn; the attacking units attempting the AV may move no farther than turn. However, other attacking units may join in the attack and create an automatic victory situation resolved during combat (21.3). For example, the attacker moves 14 factors adjacent to an inverted defending unit and announces an AV attempt. If the defending unit is a one or two factor unit, an automatic victory situation occurs. If the defending unit is stronger than two factors, it remains hidden and it may not be AVed in the movement phase of that turn. If additional units are added to the attack, the defending unit may still be AVed during combat.

Revealing Inverted Units

Inverted units are turned face-up and may be examined by the enemy player when one of the following situations occurs:

1. During the combat phase of a turn, before attacks are announced and odds are determined, an inverted unit is in the ZOC of an enemy unit or an unreduced enemy minor city. This can keep the attacker in the dark about enemy dispositions until combat is joined. It gets even more interesting if the *Mission Matrix* combat system is used. (More about that later.) Note that inverted units are not turned face-up due to enemy units advancing adjacent to them after combat.

2. An inverted unit makes an amphibious invasion or airborne drop.

3. An inverted unit ends its movement in the enemy home country.

4. An inverted unit ends its movement in the ZOC of an enemy patrolling/interdicting FTR or TAC (33.7).

5. An inverted unit suffers an attack on the BBT that requires it to lose one or more factors. Note that face-up units help to keep inverted units hidden by taking losses on the BBT.

6. A hex containing an inverted unit is the target of a "guerrilla recon mission" (see *Guerrilla Rules* below).

7. An inverted unit at sea is forced to take losses (see *Naval Rules* below).

Clever use of inverted units can lead to surprises for both the attacker and the defender: Is that force at sea four ranger battalions or four marine divisions; is that city being defended with weak infantry brigades or mighty armor divisions? It is now wise to maintain a reserve of inverted units; it is possible to make a feint with weak units while the powerful armor and artillery gather for the main thrust. The Inverted Units Rule opens up a whole realm of new possibilities in *BLITZKRIEG*.

GUERRILLA WARFARE

"Don't Feed the Guerrillas or
They Will Drive You Bananas"

Another aspect of *BLITZKRIEG* which I found unsatisfying is the Guerrilla Warfare Rules, which were changed very little in the 1975 version. They are abstract and very simple. I wish to present an alternative inspired by Vietnam and Afghanistan. This alternative is inevitably more complex than the current rules, but much more interesting.

The Guerrilla Warfare Rules require pen and paper to record the positions of hidden guerrilla bases. They apply only to the Tournament Game, since they are coordinated with the Minor Countries rules (29.), and include attacks on air bases (30.2).

Guerrillas

Guerrilla bands are formed and controlled by the liberator of a minor country to harass the aggressor within that minor country. They are not represented by physical counters on the mapboard; rather, the location of each guerrilla base is secretly recorded on a piece of paper. Guerrillas are created once a neutral country is invaded. They are created only in minor countries; all the able-bodied men of the major powers are drafted into the regular armies of Great Blue and Big Red.

Alone, guerrillas are incapble of driving an invader out of their country, but they can wreak havoc on an uninvited guest. Guerrillas can interdict supply roads, blow up bridges, make rocket attacks on air bases, and supply information to liberator forces.

The aggressor has the choice of putting up with guerrilla activity, garrisoning vulnerable points in his conquered territory, or mounting expeditions to eliminate guerrilla activity. Either way, the guerrillas will reduce his front line strength and make their contribution to victory.

Forming Guerrilla Bands

No guerrilla activity takes place in a minor country until that country is the victim of a major invasion, which occurs when at least one of the cities in that country is reduced on the Minor City Reduction Table (MCRT). Until that time, rules 29.6 and 29.7 apply, representing the efforts of the small regular forces of that country. Once a city falls, these rules no longer apply for that country, commencing on the aggressor's following turn. Instead, he is now opposed by irregular forces.

In each such minor country, the liberator may form one guerrilla band each turn, provided that:

1. The aggressor has reduced at least one city in the country;

2. The aggressor has at least one ground unit in the country; and

3. There are fewer guerrilla bands operating in that country (including guerrilla bands that originated in that country but are using another country for sanctuary) than cities in that country that have been reduced.

Note that each minor country may never have more guerrilla bands than cities reduced by the aggressor.

A guerrilla band is created by writing the location of its home base on a piece of paper, which is kept secret from the enemy. A guerrilla base may only be created in a forest or mountain hex in its own country, not currently occupied by an enemy ground unit. It may be created in an enemy ZOC, or in a hex already occupied by one or more guerrilla bands.

Guerrilla Missions

A guerrilla band cannot undertake any missions on its turn of creation. On each subsequent turn each guerrilla band may either change its base, interdict a supply road, blow up a bridge, make a rocket attack on an air base, or (if the *Inverted Units Rule* above is being used) recon one hex containing inverted aggressor units. Each guerrilla band may undertake only one of the missions in a turn. A guerrilla band is not required to undertake a mission at all. More than one guerrilla band may undertake the same type of mission.

The target hex for a guerrilla band's mission must be within four hexes of its base. The four hexes may not pass through aggressor ground units, or lake or sea hexes. They may pass through aggressor ZOCs and other countries, since guerrillas do not have much respect for national borders. All guerrilla missions are announced by the liberator during the movement phase of his turn.

Interdicting Supply Roads

A common use of guerrilla forces is to interrupt enemy supply lines. A guerrilla band may interdict a road (not city) hex being used as a supply road by the aggressor. The road hex must be adjacent to a mountain or forest hex and not in the ZOC of an aggressor ground unit. The interdiction takes effect at the start of the aggressor's turn, when combat supply is being determined. An interdiction mission does not affect the ten-hex supply route being traced overland to a road, but it blocks the supply route being traced along the road, as if it were an unfriendly city. This has no effect on subsequent movement of aggressor units or advance/retreat after combat, other than the normal effects of lack of supply such may entail. Only one guerrilla band may interdict any one hex.

Bridge Demolition

A guerrilla band may blow up a bridge not occupied by an aggressor ground unit. A bridge is defined by a road crossing a river, as in EE41, *not* running parallel to a river, as in DD40, and *not* a city on a river, as in CC39. At the start of the aggressor's turn, the bridge is considered destroyed. In terms of the game, act as if the road did not exist in that hex, for one complete turn. Thus a supply road may not be traced through that hex, and units may not use the road bonus when entering or exiting that hex. It is repaired at the start of the aggressor's following turn—unless blown up again, of course.

Rocket Attacks on Air Bases

A guerrilla band may launch a rocket attack on an aggressor air base, in an attempt to reduce the air strength at that air base. The attack is resolved during the liberator's combat phase, *after* intercepting FTRs land. The liberator rolls on the "1" column of the BBT for each guerrilla band attacking an air base. Only air units in the base being attacked may suffer losses; ground units are unaffected. Each guerrilla band attacks independently of other guerrilla bands and other liberator attacks on the same base.

Recon Missions

This mission applies only if the *Inverted Unit Rule,* or some other hidden unit rule, is being used. A guerrilla band may make a reconnaissance probe of one hex containing aggressor units. Any aggressor units in the target hex are immediately turned face-up at the start of the liberator's movement phase.

Changing Bases

When the aggressor's in hot pursuit, it is time to pack up and move on. A guerrilla band may move its base up to four hexes in one turn. The liberator must record the new location of the base. The new base must be in a mountain or forest hex, and the guerrillas may only move through mountain or forest hexes to get there. They may not move through aggressor ground units, but they may ignore ZOCs of aggressor units. Any number of guerrilla bases may occupy the same hex. The base may be moved to a forest or mountain hex in any adjacent country (remember Cambodia?), as long as it is adjacent to the border with the guerrilla's home country. A guerrilla band using another country for sanctuary in this manner may still conduct operations in its home country.

Liquidating Guerrilla Bands

Guerrilla bands are never destroyed during the execution of a mission. They are eliminated only if an enemy ground unit enters the hex containing the guerrilla base. When this occurs, all guerrilla bases in the hex are eliminated with no detriment to the regular enemy unit. The aggressor is told how many bases have been eliminated, and which country they belong to, during his combat phase. Air units have no effect on guerrilla bases since the guerrillas are adept at camouflage in the forests and in the use of caves in the mountains.

Note that guerrilla bases have no ZOC, ignore aggressor ZOCs, are always hidden, and do not affect the movement, advance, or retreat of aggressor units. Since guerrilla bases are limited mountains or forests, regular units must stop when they enter a guerrilla base hex due to the terrain.

The liberator may deliberately liquidate guerrilla bands in his turn to allow the formation of a new band in a more favorable location in the following turn (subject to the above rules for creating guerrilla bands) or simply to frustrate his opponent who is hunting for guerrilla bases. A guerrilla band may not conduct a mission on its turn of creation or liquidation.

To better illustrate the *Guerrilla Rules,* consider the following example. Great Blue launches an unprovoked invasion against the unnamed country on its eastern border. Massive Blue forces capture five cities on the first turn, V20, X27, M14, U11, and CC15. The regular troops, in a futile defense, hardly delay the mechanized Blue forces, but they do manage to inflict two factors of damage on the aggressors, due to rule 29.6. Since at least one minor city has fallen, 29.6 and 29.7 no longer apply to that country; the Guerrilla Rules apply instead.

With most of their country overrun, the heroic citizens take to the hills to form guerrilla bands. The Red player, being the Liberator, forms a guerrilla band during his move. He secretly writes down the location of its base: CC19. It may not undertake a mission this turn, since it is being formed.

On Turn 2, Blue takes the final city, EE25, and masses troops near EE25 for an invasion of the small neutral country in the center of the board. The Red player, on his turn, creates a new guerrilla band at BB23, and announces a rocket attack on Blue aircraft based in CC15. The rocket attack has no effect, and the Blue player ignores the guerrilla threat in favor of more important issues.

On Turn 3, Blue launches his planned invasion of the middle country, capturing all three cities. Red attacks Blue's troops on the main front, and repeats the rocket attack on the air base at CC15. Red also creates another guerrilla band in EE20, and moves the band from BB23 to Z22, in a still neutral country. Note that a guerrilla band may move more than one hex through mountains and forests, but may not enter clear terrain. Even though it moves outside its original country, it must be on the border with its original country and may launch missions in its original country.

The guerrillas are lucky this time and a die roll of "1" eliminates a SAC factor. Blue, on his fourth turn, decides to take revenge on the guerrillas and diverts a division from the main battle. He breaks it up into brigades and searches for guerrilla bases in hex Z13, AA14, BB14, and CC18. His troops find nothing but rock. Meanwhile, the battle rages in the middle of the board.

Red counterattacks in the center and creates another guerilla band in V23. The other three bands are put to good use interdicting the Blue supply line. The band in Z22 blows the bridge in W21; the guerrillas in CC19 interdict the road in AA21; and the road hex BB19 is interdicted by the guerrillas in EE20. This isolates the entire Blue army in the center.

Blue retreats and masses reinforcements around EE25 on Turn 5. He continues his war against the guerrillas by searching AA13 and CC19. This time he eliminates a guerrilla base in CC19. He also garrisons the critical roads with another division taken from the main front.

Red pursues the retreating Blue forces, and continues the guerrilla war. The guerrillas in V23 destroy the bridge in W21, a new base is created in CC18 even though it is adjacent to the Blue unit in CC19, and the other two bands recon inverted Blue units in DD24 and EE24. EE24 has only a few infantry brigades, but DD24 contains three breakthrough artillery divisions, a prime target for the bombers of the Red Air Force.

Blue never recovers from the isolation on Turn 4. The weakened Blue forces, reeling from Red's unrelenting offensive, are forced to abandon EE25 and retreat back to their own borders, harassed all the way by guerrillas, until their country is forever freed from the iron grip of Great Blue.

By now you should have a good idea how guerrillas work, how to use them, and how to defend against them.

THE MISSION MATRIX

"Two, Four, Six, Eight;
Now It's Time to Infiltrate"

When a general orders his troops to attack, he usually has a specific objective in mind. He will order his troops to perform a mission, such as capturing a city, destroying an enemy formation, pinning down the enemy, or finding out what is lurking in those woods. The commander of the attack will then choose tactics appropriate to the mission. Similarly, there is more than one way to defend a position. A commander can try to hold on at all costs, defend in depth to thwart an armored spearhead, delay an enemy advance, order a counterattack, or have his troops get the hell out of there.

There have been a few attempts to incorporate the idea of varying tactics and missions into combat resolution, most notably in *KRIEGSPIEL* and *1776.* In *KRIEGSPIEL,* combat was determined entirely by the selection of cards and the odds ratio. The attacker's card determined his advance, and

MISSION MATRIX TABLE

		BLITZKRIEG	BALANCED	FRONTAL	INFILTRATE	HOLDING	PROBE
STANDFAST	1	DE,AA4	DE,AA1	½X,DE,AA1	1DE,AA1	1DE	C
	2	½X,DE,AA3	1AE,½DE	X,AA1	1DE,AA1	C	AB1
	3	X,AA1	½X	X	1DE	C	AB1
	4	½X	1X	½X	1X	C	AB1
	5	1X,AB1	1X,AB1	1X	1AE	C	AB1
	6	1AE,AB1	1AE,AR1	½X,AE	1AE,AB1	C	AB1
	7	½AE,AR2	1AE,AR2	1DE,AE	1AE,AR1	1AE,C	AB1
	8	AE	½AE,AR2	AE	½AE,AR2	1AE,AB1	1AE,AB1
BALANCED DEFENSE	1	DE,AA4	½DE,DR4,AA2	½DE,DR2,AA1	1DE,DR2,AA1	1DE	C
	2	½DE,DR4,AA3	1DE,DR2,AA1	½X,DB2,AA1	1DE,AA1	C	C
	3	½DE,DR3,AA3	1X,DB2,AA1	½X	DB1,AA1	C	AB1
	4	1DE,DR2,AA2	C	1X	DB1,AA1	C	AB1
	5	1X	AB1	1X	C	C	AB1
	6	C	AR1	½X,AE	AB1	AB1	AB1
	7	1AE,AB1	1AE,AR1	1DE,AE	1AE,AB1	1AE,AB1	AB1
	8	½AE,AB1	½AE,AR2	AE	1AE,AR1	1AE,AB1	1AE,AB1
DEFENSE IN DEPTH	1	½DE,DB3,AA2	DE,AA1	DE,AA1	½DE,DR2,AA1	1DE	C
	2	1DE,DB2,AA1	½DE,DR2,AA1	½DE,DR2,AA1	1DE,DB2,AA1	C	C
	3	1X	½DE,DB2,AA1	½X,DB2,AA1	1DE,DB2,AA1	C	C
	4	1X,AB1	1DE,DB2,AA1	1X,DB2,AA1	1DE,DB2,AA1	C	AB1
	5	1AE,AB1	1X	½X	1X	C	AB1
	6	½AE,AR1	C	½X,AE	C	AB1	AB1
	7	½AE,AR2	1AE	½X,AE	AB1	AB1	AB1
	8	AE	1AE,AB1	1DE,AE	1AE,AB1	1AE,AB1	AB1
COUNTER-ATTACK	1	DE,AA4	DE,AA2	DE,AA1	½DE,DB1	½DE	1DE,DB1
	2	½DE,DR4,AA3	DE,AA1	½X,DE,AA1	1DE,DB1	1DE	DB1
	3	½X,DR3,AA2	½DE,D2,AA1	X,AA1	1X	C	C
	4	X,AA1	1X,DB1	X	1AE	1X	AB1
	5	X,DA1	1X,AB1	X,DA1	1AE,AR1,DA1	1AE	AB1,DA1
	6	½X,AR2,DA1	1X,AR1	½X,AE,DA1	1AE,AR1,DA1	1AE,AB1	AB1,DA1
	7	½AE,AR2,DA1	1AE,AR2,DA1	1DE,AE,DA1	½AE,AR1,DA1	1AE,AB1,DA1	1AE,AB2,DA1
	8	AE,DA1	½AE,AR2,DA1	AE,DA1	½AE,AR2,DA1	½AE,AB1,DA1	½AE,AR2,DA1
DELAY	1	DE,AA1	1DE,DR2,AA1	½DE,DR2,AA1	½DE,DR2,AA1	C	DB1
	2	½DE,DR1,AA1	DB1,AA1	1DE,DR2,AA1	1DE,DB2,AA1	C	DB1
	3	1DE,DB2,AA1	DB1,AA1	1X,DR1,AA1	1DE,DB2,AA1	C	DB1
	4	DB2,AA1	DB1,AA1	1X,DB1,AA1	DB2,AA1	C	DB1
	5	DB2,AA1	DB1,AA1	1X	DB2,AA1	C	AB1
	6	1AE	C	1AE	C	C	AB1
	7	1AE,AB1	AB1	½AE	AB1	AB1	AB1
	8	1AE,AR1	AB1	AE	1AE,AB1	AB1	AB1
WITHDRAW	1	DE,AA4	1DE,DB3,AA2	1DE,DB4,AA1	DB4,AA1	1DE,C	DB4
	2	½DE,DB2,AA4	DB4,AA1	1DE,DB4,AA1	DB4,AA1	DB1,AA1	DB4
	3	1DE,DB3,AA4	DB4,AA1	DB4,AA1	DB4,AA1	DB1,AA1	DB4
	4	DB4,AA4	DB4,AA1	DB4,AA1	DB4,AA1	DB4	DB4
	5	DB4,AA3	DB4,AA1	DB4,AA1	DB4,AA1	DB4	DB4
	6	DB4,AA2	DB4,AA1	DB4,AA1	DB4,AA1	DB4	DB4
	7	DB4,AA1	DB4,AA1	1AE,DB4,AA1	DB4,AA1	DB4	DB4
	8	1AE,DB4,AA1	DB4,AA1	1AE,DB4,AA1	DB4,AA1	DB4	DB4

the defender's card determined his retreat; the combination of the cards on a matrix determined losses. In practice, it became merely a guessing game, with advances and retreats mostly an incidental result of card selections designed to minimize your losses and maximize your opponent's casualties. It did not enjoy great popularity.

1776 used tactical cards to generate a die roll modifier, which usually had the same effect as having greater or lesser forces in the battle. The tactical cards added spice to the game, but they didn't affect the nature of the results, with the exception of the Withdraw tactic; they only made the results more or less favorable.

My *Mission Matrix* allows both the attacker and the defender to give specific orders to their troops in each battle. The nature of the results possible is determined by cross-indexing the attacker's choice with the defender's choice on the Mission Matrix Table. The die is rolled and the odds are still determined as before, but the result depends on the missions assigned as well as the die roll and odds ratio.

The Mission Matrix works very well with the *Inverted Unit Rule* presented previously, but either rule can be used independently of the other. Unlike the *Inverted Unit Rule,* the Mission Matrix requires the Tournament Game substitute units (26.), since many of the results require the loss of individual combat factors. To use the Mission Matrix, take 12 index cards and write one of the attacker's six missions on six of them, and one of the defender's six possible missions on the other six.

Attacker's Missions

The attacker's six missions are described in order of descending violence.

Blitzkrieg: A sharp, violent attack on a narrow front designed to achieve a quick breakthrough. It has the potential of the greatest gains of any of the attacker's missions, but can also sustain high casualties. It is deadly against an enemy *Withdraw,* and effective against a *Balanced Defense.* It can lead to a glorious victory, a catastrophic defeat, or a bloody melee if it is used against a defender ordered to *Standfast* or *Counterattack.* A Blitzkrieg attack can bog down if the defender attempts to *Delay,* and it is vulnerable to a *Defense-In-Depth.*

Frontal Attack: A Banzai-like charge, the Frontal Attack is a most unsubtle mission designed to inflict maximum losses on the defender. Of course, it also inflicts maximum losses on the attacker. The Frontal Attack is a good choice when you want to destroy a key enemy unit, or your own troops are forced to attack with their backs against the wall. Note that there is no possibility of the attacker retreating in a Frontal Attack, should some attackers be fortunate enough to survive it. The Frontal Attack is the most effective attack against a *Delay Mission.* Like the Blitzkrieg Attack, it results in heavy losses all around against a *Counterattack* or *Standfast Defense.*

Balanced Attack: A more cautious attack on a broad front, mostly designed to gain the enemy's position with moderate risk to the attacking forces. It is a good deal less blood than the Blitzkrieg or Frontal Attack, but also less effective in the damage it inflicts. It is most effective against a *Defense-In-Depth,* and has an excellent chance of advancing against any enemy defense.

Infiltration: Think of infantry in tennis shoes silently tiptoeing past hostile sentries, to suddenly appear in the enemy's rear. This is the opposite of the Frontal Attack. Low casualties usually result from an Infiltration. It is ineffective against a *Withdrawal,* vulnerable to a *Counterattack,* and doesn't get anywhere against a *Standfast Defense.* It will often

gain ground against a *Balanced Defense,* a *Defense-in-Depth,* and an enemy attempting to *Delay.*

Holding Attack: An attack designed to pin down the enemy in place. The results take advantage of the rule that only allows Armor and Air Assault units to move if they begin their turn adjacent to enemy units. A Holding Attack is the best way to engage enemy infantry and artillery on one part of the front, while your main force executes attacks elsewhere. It can only suffer significant losses from a *Counterattack.* It is effective in holding enemy units in any type of defense; it even has a chance of preventing an enemy *Withdrawal.*

Probe: A reconnaissance mission to determine the enemy forces in a particular position. Since a Probe is a very safe attack, vulnerable only to a *Counterattack,* it can be used as a soak-off as well. It is most useful when using the *Inverted Unit Rule,* since a Probe is the cheapest way to discover the identify of an inverted unit.

Defender's Missions

The defender's missions can be divided into two groups, missions designed to hold the position and inflict losses on the attacker, and missions that are more concerned with other objectives: pushing the attacker back and gaining his position, delaying the attacker, or withdrawing the defenders from combat.

Standfast: Hold the position at all costs. Put everything on the line to stop the attack or go down trying. This defense has the best chance of inflicting casualties on the attacker and holding the position. However, it is usually expensive for the defender, too, and it is susceptible to a breakthrough if the line fails to hold. A *Blitzkrieg* can get a good advance against a Standfast Defense, but it can also be wiped out. A *Frontal Attack* will often result in a blood bath. A Standfast Defense is sure to be pinned down by a *Holding Attack.* A Standfast Defense is best used when the defender has no retreat, when the position is vital to hold, or when the attacker has low odds.

Balanced Defense: A flexible defense which attempts to hold the position if possible, or retreat with minimum losses. Think of it as having two brigades up and one back, in reserve. It can yield a big advance to a *Blitzkrieg,* but is effective against a *Frontal Attack.* A Balanced Defense often gives up ground, but very rarely will the defending force be eliminated. It should only be used when the defender has a retreat route available.

Defense-In-Depth: One brigade up and two brigades back. This defense is designed to trap the *Blitzkrieg.* With fewer troops up front, it is vulnerable to most other types of attack. It is the most vulnerable defense to an *Infiltration.* It is harder to pin down by a *Holding Attack* than a Standfast or Balanced Defense.

Counterattack: A violent reaction to the enemy attack. It works best against a low odds attack, but it can get the defender into big trouble against a superior enemy. A *Frontal Attack* against a Counterattack is the most deadly combination of missions. It can often result in the defending force being wiped out, but it can also result in the defender eliminating the attackers and gaining the attacker's hex for a jump off position in his turn.

Delaying Action: This mission trades space for time. It normally gives up the position but robs the attacker of a big advance. It suffers heavy losses against a *Blitzkrieg,* but slows it down. It inflicts light losses on the attacker, but usually conserves the defender's forces. A Delaying Action is generally used by an inferior army being hard pressed, to slow up the attacker until the defender's reserves can reach the scene.

Withdraw: This is a familiar tactic from both *KRIEGSPIEL* and *1776.* Basically, the defender makes like a tree and leaves. Withdrawing troops can be destroyed or trapped only by a *Blitzkrieg.* Otherwise they get away with light losses at worst. A Withdrawal should only be attempted if the defender has a retreat route available, and he is willing, even anxious, to use it.

Procedure for Combat Resolution

The procedure for combat resolution using the Mission Matrix replaces Rule 15 of the Basic Game. Rules 12., 13., and 14. still apply. Note that the Mission Matrix only applies to ground combat previously resolved on the Basic Game or Tournament Game Attrition Tables. It does not apply to Automatic Victory (21.), nor to attacks resolved on the BBT, Air Combat Table, Minor City Reduction Table, or to attacks resolved using the VICTORY IN THE PACIFIC system, described below.

Step 1. The attacker specifies which attacking units are attacking which defending hexes, following rules 12., 13., and 14.

Step 2. Resolve each attack, one at a time. For each attack, the attacker and defender each secretly select one of their six Mission Cards.

Step 3. If using the *Inverted Units Rules,* reveal all inverted units involved in the battle by turning them face up.

Step 4. The attacker and defender reveal their respective Mission Cards selected in Step 2.

Step 5. Determine the odds of the battle as in 15.1.

Step 6. The most crucial: the attacker rolls one die.

Step 7. Cross-index the die roll with the odds on the Combat Results Table to get a numerical result from "1" (most favorable to the attacker) to "8" (most favorable to the defender).

Step 8. Cross-index the mission cards selected in Step 2 and revealed in Step 4 on the *Mission Matrix* to get a range of possible results, and use the numerical result from Step 7 to determine the results of the battle.

Step 9. Execute the results determined in Step 8. Losses are taken first, then retreats are executed, followed by advances.

Step 10. Resolve the next battle of the attacker's choice until all combat has been completed.

Restrictions on Missions

1. A *Blitzkrieg* may not be made against a forest or mountain hex, and the attacking force must include at least one factor of armor or air assault.

2. An *Infiltration* must include at least one factor of infantry, airborne, or ranger.

3. If the defender selects a *Counterattack,* he loses all doubling due to terrain.

4. Since the odds of a battle are not always known until after the cards are picked and other battles are resolved, soak-offs may be made at any odds if the defender has any inverted units involved in the battle. This contradicts rules 14.7 and 14.9. The defender may turn inverted units face-up after the attacker finishes moving but before he announces battles, to force the attacker to soak-off at worse odds.

5. In some cases attacks may be made at 7-1 or greater, or 1-7 or worse. Attacks at 7-1 or more automatically result in a 'DE, AA4'. Attacks at 1-7 or worse automatically result in an 'AE, DA1'. An attack is considered an automatic victory only if announced during the movement phase.

Explanation of Combat Results

AE—All attacking units in the battle are eliminated.

½AE—Half (round up) of all attacking combat factors in the battle are eliminated.

1AE—Attacker loses one combat factor from units in the battle.

DE—All defending units in the battle are eliminated.

½DE—Half (round up) of all defending factors in the battle are eliminated.

1DE—Defender loses one combat factor from units in the battle.

1X—Both the attacker and defender lose one combat factor from units in the battle.

½X—The side with fewer combat factors in the battle loses half (round up); the other side loses at least an equal number of combat factors from units in the battle. Compute combat factors in the same manner as in determining the odds.

X—The side with fewer combat factors in the battle loses all of them; the other side loses at least an equal number of combat factors from units in the battle. Compute factors as above.

AB#—Attacker's units in the battle pull back the number of hexes specified—at least one hex—of the attacker's choice.

AR# —Attacker's units in the battle retreat the number of hexes specified—but at least one hex—of the defender's choice.

DB#—Defender's units in the battle pull back the number of hexes specified—but at least one hex—of the defender's choice.

DR#—Defender's units in the battle retreat the number of hexes specified—but at least one hex—of the attacker's choice.

C—Contact; no losses, retreats, or advances.

AA#—Attacker's units in the battle may advance the number of hexes specified, if the defending hex is vacated and the attacker still has units surviving the battle. Ignore all ZOCs during the advance, but the advance is limited by terrain as described on the Basic Game Attrition Table. The first hex of the advance must be the defeated unit's hex. Exception: Infantry, Airborne, and Ranger units making an *Infiltration* may advance into a vacant hex adjacent to the defeated unit's hex, if the defender does not retreat. Armor and Air Assault units may advance the maximum allowed. Infantry, Airborne, and Ranger units may advance two hexes maximum,

COMBAT RESULTS TABLE

DIE ROLL	1-7+	1-6	1-5	1-4	1-3	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7+-1
1		7	6	5	5	4	2	1	1	1	1	1	
2		8	7	6	5	4	3	2	1	1	1	1	
3	AE,	8	8	7	6	5	4	3	2	1	1	1	DE,
4	DA1	8	8	8	7	6	5	4	3	2	1	1	AA4
5		8	8	8	8	7	6	5	4	3	2	1	
6		8	8	8	8	8	7	5	4	4	3	2	

and artillery may only advance one hex. As always, advance is optional.

DA1—Defending units in the battle may occupy a vacant hex previously occupied by an attacking unit involved in that battle.

Losses are always taken only from units involved in the battle. The owning player chooses which units take losses if partial losses are required, subject to the following:

1. Losses incurred by the attacker in a *Blitzkrieg* must include at least one factor of Armor or Air Assault. Losses incurred by the attacker in an *Infiltration* must include at least one factor of Infantry, Airborne or Ranger.

2. If TAC or MDM are supporting an attack, 30.41 must be followed unless it contradicts the rule above.

Units suffering AB#, AR#, DB#, or DR# must retreat at least one hex. They may retreat up to the number of hexes specified, subject to the option of the player controlling the retreat (attacker in AB#, DR#, defender in DB#, AR#) and Basic Game retreat restrictions. Units are eliminated due to lack of retreat only if they cannot retreat at least one hex.

Examples of Mission Matrix Combat

1. A large armored force attacks two enemy units surrounded in a city. The attacker hopes for a large gain of territory and thus picks *Blitzkrieg*. The defender, being surrounded, chooses a *Standfast Defense*. Once the cards are picked, the units are revealed. The attacker has 36 factors attacking, the defender has 8 factors doubled, or 16 defense factors. The odds reduce to 2-1. The die roll is a "2," yielding a result of 2. Cross-indexing the cards chosen, the result is '½X,DE,AA3'. The defender first loses four factors, doubled to eight; the attacker must also lose eight attack factors. Then the remainder of the defenders are eliminated, and the attacking armor units may advance up to three hexes, any attacking infantry may advance two hexes, and attacking artillery may advance one hex.

2. An attacking infantry division is attacking a stack of two unknown enemy units. The attacker chooses to probe to discover what is in the target hex. The defender has two artillery units in the target and chooses a *Withdraw* to preserve these valuable units. A *Probe* versus a *Withdraw* results in 'DB4' regardless of the odds. However, all units involved in the battle are turned face up before the retreat is executed. The defender pulls his units back up to four hexes.

3. Four infantry divisions (sixteen factors) attack a defending force in the mountains. The attacker chooses an *Infiltration,* the defender chooses a *Balanced Defense*. The defender exposes his forces, which are six infantry factors. The odds are 16-12, or 1-1; the die roll is a "1", and the numerical result is a 2. Using the Mission Matrix, this results in '1DE,AA1'. The defenders lose one factor, but hold their position. The infiltrating infantry advances one hex on either side of the defenders, surrounding them.

4. A four-factor infantry division is attacking an unknown unit believed to be a one or two factor infantry brigade. The attacker chooses a *Balanced Attack*. The defender, knowing that he has a six-factor armored division in the battle, chooses a *Counterattack*. When the units are turned face-up, the odds are determined to be 4-6, or 1-2. The attacker rolls a '6', yielding an 8 result—which is '½AE,AR2,DA1'. The attacker loses two factors, the defender retreats the remnant of the attacking force two hexes, and advances to occupy the attacker's hex.

5. Some unknown attacking units are attacking two defending units in a city. The attacker selects a *Holding Attack,* hoping to pin down a dangerous enemy force. The defender, expecting a *Blitzkrieg,* picks a *Defense-in-Depth*. When the units are turned face up, the attacker is seen to have sixteen factors of infantry. The defender has two one-factor infantry brigades holding the city. The odds are 16-4, or 4-1. The attacker rolls a '3'. The result is a 1, or '1DE'. The defender eliminates one factor and holds the city, but the last remaining brigade is indeed pinned down by the four infantry divisions.

NAVAL BLITZ

"To Everything There is a Sea Zone,
A Sea Zone to Defend, a Sea Zone to Invade;
A Sea Zone To Patrol, A Sea Zone to Raid"

We now come to the part of the article that you have all been waiting for. What does *BLITZKRIEG* have to do with *VICTORY IN THE PACIFIC?* In *BLITZKRIEG,* movement at sea is done using sea zones. In *VITP,* movement is done using sea areas. We have a perfect match. Actually, there are a few more details, but the basic idea is to match *VITP* sea areas with *BLITZKRIEG* sea zones.

The *VITP* system adapted to *BLITZKRIEG* replaces the abstract Naval Ascendency Optional Rule (35.), and the less abstract rules given in the *GENERAL* ("Surface Raiders" by Donald Greenwood, Vol. 12, No. 2, Jul-Aug 1975). Also disregard rule sections 20.2, 27.3, and 30.3. There is now no need to assume a fleet; fleets will be visible on the board.

These rules are replaced by the *VITP* rules, as modified below. The only other components of *VITP* that will be required are the ship and damage counters. Land-based air and amphibious units will not be needed. At the start of the game, each side has four aircraft carriers (CV), four battleships (BB), and eight cruisers (CA). Great Blue selects his ships from the US, British, Australian, and Dutch ships on the *Allied Starting Forces Chart* (including Groups W, X, Y, and Z). They may be placed in any Great Blue port, or at sea in Zones A, B, or C, along with as many as ten ground units, when Blue makes his normal setup. TAC and FTR units based in coastal ports may begin the game patrolling at sea.

Big Red selects his ships from the *Turn 1* Japanese ships. They may be placed at any port in Big Red or at sea patrolling in Sea Zones D or E. Up to ten ground units and patrolling TAC and FTR may also start at sea in Zones D or E.

A ship must be either in port or in one of the five sea zones at all times. The ports are as defined in 19.4. In addition, there is a neutral port which has restricted use. Any port or sea zone may have any number of ships; there is no stacking limitation on ships in port or units at sea. Note that a ship at sea may be either patrolling or raiding, just as in *VITP*. Ships take damage points when hit as in *VITP*. Ground units at sea and land-based air suffer factor losses, as in *BLITZKRIEG*.

The Naval Phase

1. The attacker's patrolling ships must return to a friendly port hex in either their sea zone or an adjacent sea zone, ignoring enemy control of sea zones. If there is no friendly port hex in their sea zone or an adjacent sea zone, they must return to the neutral port. The attacker's land-based air in a sea zone must land at a port in their sea zone or they are eliminated. They may land only at friendly coastal ports, not at inland ports. Ground units remain at sea.

2. Ships in port (not the neutral port) may now move to sea. If a ship wishes to patrol, it may move to the sea zone adjacent to its port. If that sea zone is uncontrolled by the enemy (i.e.: there are no enemy surface ships on patrol nor land-based TAC in the sea zone), it may move to a second sea zone adjacent to the first. A speed roll is required if a ship attempts to move two sea zones while patrolling; if it fails the speed roll, it becomes a raiding ship.

If a ship wishes to raid, it may move one or two sea zones as above, without a speed roll. Risking a speed roll, it may also move to any other sea zone on the board, regardless of enemy control, provided that the sea zone adjacent to its port is not enemy controlled.

Ships may also change bases in lieu of patrolling or raiding. Ships may move from any port (including the neutral port) to any other friendly port on the board, provided that the sea zones adjacent to both the port being departed and the port being entered are not controlled by the enemy.

If a ranger unit starts the turn in the same port hex as a ship, it may board that ship and sail with it. Any type of ship—CV, BB, or CA—may carry one ranger unit. No ship may carry more than one. The ranger unit shares the fate of the transporting ship. This is in addition to the ten unit limit governing normal sea movement.

Any of the attacker's TAC or FTR units may stage to a coastal port (not an inland port) to patrol the adjacent sea zone. This prevents such from undertaking any other missions this turn. If the attacker has at least one friendly port hex anywhere on the board, he may place his submarine unit (I-Boat or F-Boat) in any sea zone, regardless of enemy control.

3. If there are opposing units of any kind in the same sea zone, a naval battle occurs, as in *VITP*. *(Exception:* If there are only ground units and FTRS in a sea zone, or only land-based air and submarines, no naval battle occurs there.) *VITP* rules for combat are followed, including multiple rounds, rolling for day or night, attack bonus, submarines, land-based air, etc., with the following exceptions. The defender is considered in control of the sea zone if he has any patrolling surface ships or TAC, and adds +1 to his die roll in choosing day or night. Attacks may not be directed against specific land-based air units; rather they are made against all enemy land-based air taken together. Each "6" rolled against land-based air eliminates one factor —with FTRs eliminated first, then TAC factors. Only TAC, not FTRs, may attack enemy ships and ground units; both FTRs and TAC may attack enemy land-based air. Ignore 'disable' results against land-based air.

The attacker in each turn makes the retreat decision first. Disabled or retreating ships return to any friendly, undamaged port on the board. If none are available, such must return to the neutral port.

In a night battle, all surface ships have the option to be on the firing line. Ships not on the firing line may not be attacked unless all ships on the firing line are first engaged. If a battleship or cruiser is committed to the firing line, it may not take part in shore bombardment, nor land rangers. If there is more than one contested sea zone, the attacker chooses the order of resolution.

Ground units do not take part in a naval battle except as a target of a submarine. Ignore disable results; each point of damage becomes one combat factor eliminated (loser's choice). At the conclusion of a naval battle, the winner gets one day round followed by one night round of combat by his surviving ships and TAC against any enemy ground units in that sea zone. Normal bonuses apply. Carriers that attack ground units at sea may not launch air attacks against land-based targets, and battleships and cruisers that attack ground units at sea may not participate in shore bombardment. Any ship that attacks ground units at sea may not land rangers.

The ground units take losses as above. At the conclusion of combat, surviving ground units re-

main at sea; they may leave that sea zone only during their movement phase.

Supply

After the Naval Phase, determine the attacker's supply status. Supply may not be traced through a sea zone controlled by the enemy. Both players may trace supply through a sea zone controlled by neither player. Only TAC and patrolling surface ships control a sea zone and block enemy supply.

Movement Phase

Once all naval combat has been resolved, proceed with the movement phase normally. Ground units may not enter an enemy controlled sea zone or land at a port or make an amphibious invasion in an enemy controlled sea zone. Note that any number of beaches may be invaded. The attacker's carriers may be placed on a sea hex in their sea zone and launch an air strike against a land target regardless of participation in a naval battle, but not if they have attacked enemy ground units at sea. Attacking battleships and cruisers that were not on the firing line may be placed on a sea hex in their zone to make a shore bombardment. Surface ships, but not ground units, may move to a sea hex or port even if they would have to pass through an enemy ZOC to get there from the board edge. Note that ZOCs still block ground units, which are assumed to be carried in vulnerable transports. (For example: If there is a Blue ground unit in B6, no Red ground units use the port D7). Ships may not move through an enemy ground unit on a river to enter or exit an inland port. Carrier based planes may execute air strikes as if they were tactical bombers, with a range of eight from the sea hex occupied by the carrier. Use the carrier counter to represent the air mission of the carrier's planes. Rangers on a ship placed in a sea hex may invade an adjacent coastal hex.

Combat Phase

Carrier air strikes can be made against targets within a range of eight hexes of the sea hex occupied by the carrier. Each carrier may make one attack with its air strike factors. Carrier air strikes may be intercepted by enemy FTRs, in which case they are treated as escorted bombers. Losses to carrier aircraft only serve to reduce the strength for the current attack. Carrier air strikes may perform tactical bombing in support of ground attacks, including invasions (30.41), bomb airbases (33.2), and attack ships in port (which is resolved as in *VITP*). Carriers get only one air raid per turn, not two as in *VITP*. Carrier aircraft do not take losses as the result of ground combat.

Battleships and cruisers placed on a sea hex may attack adjacent enemy units on the BBT with their gunnery factors, as if they were artillery units. Ignore any attack bonus in attacking shore targets.

Ships in port may only be attacked by enemy aircraft. Carrier planes, TAC, MDM, and SAC may attack ships in port using *VITP* combat resolution, with each air factor getting one die roll. This is an additional air mission.

At the end of the Combat Phase, raiding ships must return to port and patrolling ships are placed in the "Units At Sea" box of their respective sea zones. Submarines are removed from the board, to be placed again in the attacker's next turn. If there are no friendly ports, ships must go to the neutral port, from which they can *only* transfer to a friendly port, neither patrolling nor raiding, during a future Naval Phase. This ends the turn.

Ports

Ship-borne ground units may not move into or out of a port, or to a sea hex, unless there is a route of sea hexes free of enemy ZOCs to the edge of the board. Ships (but not ground units) may go to sea from a damaged port (33.3), but may not return there. This also applies to a port in an enemy ZOC. If a port hex containing ships is occupied by an enemy ground unit, all ships in it are considered scuttled and are eliminated if the adjacent sea zone is enemy controlled. Otherwise, the ships go to the neutral port. Ships in an ungarrisoned port hex act like grounded air units (30.9). If a ship must return to port but cannot return to a friendly, undamaged port, it must return to the neutral port (a port in the neutral country). From there it may only transfer to a friendly port on a sea zone uncontrolled by the enemy when one becomes available. It may neither raid nor patrol from the neutral port.

Repair

Each undamaged port hex has a repair capacity equal to the number of hexes in its city. For example, AAA54 and BBB55 each have a repair capacity of 3. A ship that remains in port a full turn may be repaired, as in *VITP*.

Die Roll Bonuses

Only indicated carrier air strikes and gunnery factors have a bonus against ships (in port or at sea) and ground units at sea. Land-based air never has a bonus, and there is never a bonus when attacking land targets or land-based air.

Effects of Weather

Clear—None.

Gale—All units at sea must return to port; no ships or units may move to sea.

Rain or Snow—Subtract one, rather than add one, for day on day/night roll.

Fog or Ice—All actions at sea automatically night; no land-based air allowed at sea; no carrier air strikes.

Reinforcements

Each side gets one CA, one CV, and one BB per turn, starting Turn 2. These reinforcements are placed in any friendly port in the appropriate home country. They are taken only from *VITP* units available by the current turn in the *BLITZKRIEG* game. For example, the Turn 2 reinforcements may only be taken from *VITP* units available at the start of *VITP* or from *VITP* Turn 2 reinforcements. In effect, add each turn's *VITP* reinforcements to a "force pool" from which reinforcements are taken. Add eliminated ships to this force pool also. Ignore *VITP* ship withdrawals. Note that one submarine unit is available to each player each turn, throughout the entire game, provided that they have at least one friendly port.

Critical Resources

The loss of critical resources cities have the following effects, in addition to those listed in Rule 36.

OIL:

Two cities—Movement of ships reduced by one sea zone (patrol ships may only patrol adjacent sea zone, and then with a speed roll; raiding ships may move only two sea zones, with a speed roll on the second zone). Sea transfer is still allowed.

One city—Ships may only raid to the adjacent sea zone, with a speed roll required. No patrolling is allowed. Sea transfer still allowed.

No city—Ships may not move to sea.

BASIC INDUSTRY:

Two cities—No shore bombardment, carrier strikes attack at half strength (round up).

One city—No carrier strikes, ships attack at half strength (round up), no attack bonus. No shore bombardment.

No city—Cruisers and Carriers cannot make any attacks. Battleships are reduced to one attack factor, with no bonus.

NAVAL STORES:

Two cities—same as two oil cities, plus repair capacity of each port is reduced by one. Naval reinforcements reduced to 1 CA, 1 BB this turn.

One city—Same as one oil city, plus repair capacity at each port hex reduced by two. Only 1 CA allowed as naval reinforcements.

No city—No ships may move to sea. No ships may repair. No naval reinforcements.

SCENARIOS

Once you have incorporated all these rules into *BLITZKRIEG*, and played a couple of dozen times, you may want to add some additional variety to the game. I present to you five additional scenarios. The first three may be played with any combination of rules. The last two require that you use at least Sea Movement (19.) and Invasions (20.) in the Basic Game Optional Rules.

#1 Reversal. Have the Blue forces start in the Red country, and Red starts in Great Blue. The Blue forces still move first. This is more interesting if you use the *Naval Rules* presented above. Treat Big Red as Blue's home country, and Great Blue as Red's home country, for all purposes. Of course, Blue's Navy now may start in only Sea Zones D and E, while the Red Navy may start in Sea Zones A, B, and C.

#2 North vs. South. Blue units start in the Northern Peninsula of Great Blue (containing the River Sparling), the section of Big Red north of the Schutz Tributary (including city hex HHH37), and the NW, NE, and central minor countries, and Sea Zones A and E. Big Red starts in the remainder of Great Blue and Big Red, as well as Sea Zones B, C, and D. Consider the areas where each player starts as the home country of that player. The two southern minor countries are initially neutral. Blue's initial lack of resources should be compensated by Blue's initiative in moving first.

#3 Diagonal Conflict. Blue forces start in Great Blue (excluding the Sparling Peninsula), Big Red north of the Schutz, the NE and SW minor countries, and Sea Zones B, C, and E. Red forces start in the remainder of the board. Treat only the original home countries as each side's home country, and the side initially occupying a minor country is the aggressor in that country.

#4 Blue Invasion. Red initially occupies all of the board. Only Big Red is Red's home country. Treat Great Blue as Blue's home country for inverted unit and city ownership purposes. Blue units become available offboard. Ignore critical cities for Blue but not for Red. Blue gets full replacements regardless of territory owned on the board. Red is the aggressor in all minor countries. Blue has an invisible offboard port adjacent to all five sea zones. All of Blue's initial units start the game there and may move by sea to any sea zone. Blue may still have only ten divisions at sea at any time. Blue aircraft may not fly missions from the offboard port, including sea zone patrolling, but may stage from there to any friendly port hex on the board, once captured.

#5 Double Invasion. Both Blue and Red start the game off the board. The entire board is treated as neutral minor countries. Break Big Red and Great Blue into two minor countries as described above. Each side has one offboard port. Blue's port connects only to Sea Zone B, and Red's only port connects to Sea Zone E. Both sides ignore Critical Resources and get full replacements regardless of territory owned. All reinforcements and replacements start in the respective offboard port. The offboard ports are treated as above in Scenario #4.

CONCLUSION

"I Can't Believe That I Played The Whole Thing"

If you add all the Optional Rules to the Tournament Game of *BLITZKRIEG,* and then play with all the rules presented here, you have quite a complex game. If you don't wish to absorb everything at once, allow me to suggest a "Programmed Instruction" approach to *BLITZKRIEG.*

Step 1. Play the Basic Game (sections 1.-17.).

Step 2. Add the *Inverted Unit Rule,* presented above.

Step 3. Add the Basic Game Optional Rules (18.-23.).

Step 4. Add most of the Tournament Game, excluding the Bomber Aircraft (24.-29.).

Step 5. Add the *Guerrilla Rules,* presented above.

Step 6. Add the *Mission Matrix Rules,* presented above.

Step 7. Add the bombers (30.).

Step 8. Add the *Naval Rules,* presented above.

Step 9. Add Air Combat, from the Tournament Game Optional Rules (32.).

Step 10. Add the rest of the Tournament Game Optional Rules that apply (33., 34., 36.). Note that the Naval Ascendency Rule (35.) is superseded by the above naval Rules.

Comments and questions on this unique melding of two classic games are welcomed by Mr. Stahler, 6617 Mayfair Drive, T-1, Falls Church, VA 22042.

BLANK COUNTERS

Avalon Hill now sells blank, half inch counters pre-printed with standard unit notations in an assortment of six colors. Each counter sheet contains approximately 190 counters. The larger 5/8" counters are not available in different colors or with pre-printed unit notations. When ordering choose from the following colors: white, beige, blue, yellow, gray, or mint green. Blank counter sheets are available for $2.00 each, or six for $7.50, or twelve for $14.00. Add 10% for postage and handling (20% for Canadian customers, 30% for overseas orders). Maryland residents please add 5% state sales tax.

FOREIGN READERS

Due to contractual obligations with our exclusive distributors we cannot accept mail orders for games from Australia, Britain, Germany, Greece, Italy or Japan. Such orders must be placed with our exclusive distributors whose addresses you'll find listed on Page 2 of this magazine. Orders for parts and airmail subscriptions to the *GENERAL* are not subject to this ban. APO and FPO addresses of U.S. servicemen likewise are *not* subject to this ban. We also urge you to get in touch with the distributor for your country in regards to placing your *GENERAL* subscription through him which in most cases will result in considerable savings for you.

Avalon Hill Philosophy . . . *Continued from Page 2*

Not that you'll be getting rid of me entirely. As "Executive Editor" I imagine I'll still have a say of some type as to what does and doesn't get into print. Then too, the files still contain numerous manuscripts bearing my red ink so you may see bits and pieces of "Grouchy" for years to come. More importantly, I hope to be able to exert a steadying influence on the layout of the publication. As I thumb through those early issues of my tenure I am horrified by what passed for layout/graphics while I was learning my craft through trial and error. With no one to guide me through uncharted waters I learned my trade at the expense of the reader. My successor should not have that cross to bear.

Rex Martin is a wargamer of long standing who has been playing AH games for 18 years. With a degree in history and several *SQUAD LEADER* playtest credits under his belt he seems eminently qualified for the job. Indeed, his command of the requisite skills of an editor exceed my own in more than a few categories. More importantly, *THE GENERAL* will be his only job, whereas I was able to devote only a fraction of my worktime to the magazine. As a fulltime editor he will be able to bring much more effort to bear in the preparation of the magazine while maintaining his familiarity with all the games in the rapidly expanding AH line—a feat which I had found to be increasingly impossible. Who knows—he may even be able to get it out on time.

It is not without considerable regret that I step down as your editor. Many of my plans for the magazine remain unfulfilled, but I take pride in what has been accomplished and hope in the improvements that are sure to come.

Don Greenwood

WAR AT SEA VARIANT KIT

WAR AT SEA 2 expands the basic game from six sea areas to nine, adding the Black Sea, the Cape of Good Hope, and the Caribbean. The number of ports is expanded from nine to seventeen, adding Sevastopol, Turkey, Greece, Alexandria, Oran, Toulon, Gibraltar, and Africa. In addition, some of the other ports in the game have been renamed. France is now Brest, for instance.

The revised OBs include seventeen French ships, two Greek ships, eight American ships, and seven Russian ships, as well as additional British and German ships. Land-based air units, that function somewhat like the air units in *VICTORY IN THE PACIFIC,* are substituted for each side's lone airstrike marker.

The rules change many of the basic *WAR AT SEA* rules and add much more to them. New rules cover three new Convoys, the Axis Afrika Korps and the Allied Tiger and Torch Convoys. Other rules cover German Surface Raiders, POC changes and additions, access to Neutral Ports, the British X-Craft, the Italian Frogmen, and restricted movement for ships of some nationalities.

Also included is a section of Optional Rules. These rules can be used as play balance rules or just to add even more variety to the game. Many of these increase or restrict the movement of ships of certain nationalities.

This variant package is both more and less than a regular game. Its parts can be used to play any variant published to date and almost any that you might devise on your own. It is not more realistic than *WAR AT SEA,* just more involved. No attempt has been made to turn the basic game into a simulation. Quite the contrary, this kit is for those who like *WAR AT SEA* and just want more of a good thing. Players should note, however, that due to the nature of this variant (it being a conglomeration of many smaller variants and adding many variables to the rules), it may need some tinkering to establish play balance.

The Counter Sheet contains all the counters necessary to play any of the variants in *THE GENERAL* articles listed below. It is similar to the *WAR AT SEA* Variant Counter Sheet that was previously available. However, players should note that the new Variant Counter Sheet does not contain the *AIR ASSAULT ON CRETE* variant counters that were included on the original Variant Counter Sheet. The mapboard can also be used to play all of these variants.

1. Vol 13, No 3—"WAR AT SEA In The Mediterranean" (part of "Basic Probability In WAR AT SEA") by Richard Hamblen

2. Vol 14, No 3—"WAR AT SEA & The French Navy" by Dr. Joseph Connolly

3. Vol 14, No 4—"Victory At Sea" by Richard Hamblen

4. Vol 15, No 1—"Letter To The Editor" by John Lyman

5. Vol 15, No 3—"WAR AT SEA And The Russian Navy" by Sean Canfield

The *WAR AT SEA Variant Kit* which includes an unmounted 22" × 24" mapboard, three OB Charts (one Axis and two Allied), a six page rulebook, and the new *WAR AT SEA* Variant Counter Sheet, is available directly from The Avalon Hill Game Company, 4517 Harford Rd., Baltimore, Maryland 21214 for $9.50 plus 10% postage and handling charges. Maryland residents please add 5% state sales tax.

SO THAT'S WHAT YOU'VE BEEN PLAYING

Titles Listed 101 **Total Responses: 429**

Rank: Title	Pub	Rank Last Time	Times On List	Freq. Ratio
1. Squad Leader	AH	2	7	4.1
2. TRC	AH	5	7	3.4
3. Third Reich	AH	1	7	3.0
4. D&D	TSR	8	7	2.7
5. Cross of Iron	AH	4	7	2.4
6. COD	AH	7	7	2.3
7. Bulge	AH	10	2	2.1
8. Flat Top	AH	—	1	2.1
9. VITP	AH	11	7	2.0
10. Guns of August	AH	3	4	1.9
11. WS&IM	AH	16	7	1.9
12. Gladiator	AH	—	1	1.5
13. War & Peace	AH	9	2	1.5
14. War At Sea	AH	17	7	1.4
15. FE	AH	6	7	1.3
16. Magic Realm	AH	—	1	1.3
17. Afrika Korps	AH	13	7	1.3
18. Kingmaker	AH	19	4	1.1
19. Panzer Leader	AH	14	2	1.1
20. Midway	AH	—	1	1.0

A number of surprises occurred in this tabulation of players' preferences. The most unexpected must be the ascent of *FLAT TOP,* featured in this issue, to the lofty heights of the top ten. Reflecting, as usual, readership response, *GLADIATOR* appears for the first time on the list following the last issue of *THE GENERAL.* Returning to the fold are *MAGIC REALM* and *MIDWAY.* After occupying a spot since inception of this listing, *PANZERBLITZ* has dropped from the top twenty; accompanying it were *AIR FORCE, D-DAY '77,* and *NAPOLEON.* On the other hand, not unexpected was the return of *SQUAD LEADER* to preeminence while the displaced *THIRD REICH* tumbled to third.

IT IS WRITTEN

Submissions to the GENERAL

By CPT Robert D. Harmon

Over the last ten years, *THE GENERAL*'s readers have become legion, so to speak. This meant, besides an increase in circulation, a flood of article submissions to *THE GENERAL*. The days of few manuscripts are past. Standards at *THE GENERAL* have gotten higher as submissions compete for the editors' attention. If you have ever thought of writing for *THE GENERAL*, this article may be of help.

To establish my own credentials: I have been submitting manuscripts (mss.) to *THE GENERAL* since 1972. I have, as of February 1982, had 14 of them printed, not counting serializations or reprints. In simple terms, they seem to like my stuff. I've seen *THE GENERAL* go from a small, noisy quasi-"newsletter" to a large and professional journal. The *GENERAL Index & Company History* names me as the most prolific contributor after one D. Greenwood. So, when we talk about article submissions, I think I know what they're looking for.

How do you submit a ms. to *THE GENERAL*? First, get a copy of the "Guidelines for *GENERAL* Contributors." It's "must reading, and spells out exactly want they want. Any mss. that violate it are apt to land in the round file. The "Guidelines" is a one-sheet opus, and is available from *THE GENERAL* on request. If you are an aspiring writer, enclose a SASE (self-addressed stamped envelope). It's a good habit to get into when writing *THE GENERAL* or sending mss. The "Guidelines" establish the ground rules. The text of the article, both content and format, will determine whether it has a chance to see print.

Text format is the first problem, common even to printed articles. Too many submissions have long paragraphs; these look fine on a typed page, but tend to fatten when crammed into a two-inch column.

Sentences and paragraphs should be kept short. This will break up the text. Frequent use of subparagraphs help, as you can see:

1. Avoid polysyllabic expressions when short words will do.
2. Break up text with short segments when you're expressing an itemized thought.
3. Break ideas down into distinct paragraphs.

A dispersed text also helps readers to follow your thoughts. Nothing is more confusing than a long string of words doing Immelmanns with concepts.

Graphics help break up text. These make an article more attractive to the editors. They also help keep your printed article from turning into gray sludge. Graphics take three forms:

BOX. (Also known as sidebars). These are sections of text set off by borders or shading. This is a good way to pull digressions out of the text and showcase your brainstorms.

CHART. The easiest to write; the easiest for *THE GENERAL* to print. These are good for breaking down numerical analyses and can tell more than pages of text.

ILLUSTRATION. The brightest way to tell a story, especially tactical concepts. These are usually sections of mapboard and can be submitted in hand-drawn or schematic form. The former should be as neat as you can make it; the latter should be thoroughly proofed.

I've found that *THE GENERAL* may have difficulty with illustrations, as much as they like them. It takes a while to set them up for printing. Your illustrations should be very pertinent. Pictures are not in demand, right now. *THE GENERAL* can get historical photos from Washington easily. Artwork is a real long shot, when your art has to compete with Rodger MacGowan.

Text format is one major hurdle. The next is content. Let's look at the "Guidelines" categories, one by one:

- Game Analysis: Game parts and mechanics.
- Historical: Comparisons or outright recounting of a game's historical basis.
- Strategy and Tactics: Analysis on a how-to-win footing.
- Variants: You've seen these, I'm sure.
- Series Replays: Ditto.
- Miscellaneous: Humor and odds & ends.
- Unacceptable: Reviews; also any articles on Other People's Games.

Game analysis and strategy/tactics are often the same thing. They're always in season at *THE GENERAL*. They're the easiest to write, and the toughest to write well.

Analysis articles are opinions on winning, by nature, though some let opinions dominate analysis. The "best-move" articles are legion. ("I have a plan.") They're also apt to be punctured by later articles or letters in *THE GENERAL*.

History articles aren't common in *THE GENERAL*, but make a nice change from the usual analyses. Histories must pertain to an AH game, of course. They shouldn't pretend to be serious historiography; AH prints them mainly to tell a game's story. History articles should try to be readable. *GENERAL* histories can and should be more epic than scholastic; our society has enough of the latter already.

The Selling of The Hexagon

An article is particularly desirable if it is timely, that is, about a brand-new AH game or about one that is heavily-played. The latter can be found in the "So That's What You've Been Playing" sidebar of each issue. Obviously, *THE GENERAL* isn't after *KRIEGSPIEL* mss.

Your article can concern any game in print, but a new or popular game is preferred. That's what the readers are interested in, after all.

New-game articles can be analytical, at nuts-and-bolts level. Numerical and statistical studies, if clearly-charted, can be a fine introduction to the game.

New-game articles can incorporate history, supplement analysis or describe the game's subject exclusively. Pure-history articles can be a boon to a new-game issue, but history can also supplement new-game analysis.

Strategy talks are riskier than analyses. Nobody is familiar with the game at this point, but they soon will be, and you're apt to find your theories gutted like fish. The "best-move or -plan" articles make targets that are big enough to use at Ft. Benning.

In short: Focus on analysis over strategy. Game mechanics and unit statistics are better than vague double-doming.

For that matter, theorizing is just as dangerous in a popular game like *THE RUSSIAN CAMPAIGN*. You're playing to a gallery of experts, and faulty strategy will spice up the "Letters to the Editor" column for months afterwards.

Timely articles will have a better chance of seeing print. Just be sure they're on-target.

Variants are the biggest source of mss. They're also the biggest headache for the editors. I'm sure Don Greenwood must tire of reading about "Martian Intervention in THE RUSSIAN CAMPAIGN" or "What If Napoleon Was a Transvestite." Any variant mss. had better be good to survive the editors' skepticism.

Variants can be broken down thus:

- New scenarios. *PANZERBLITZ* and *WOODEN SHIPS* are examples of scenario games where new scenarios can be added. These can and should cover new history: Events not covered in the game proper.
- Rules rewrites. These are "advanced" rules versions that don't require new counters. These are tough to make work, tough to sell (AH likes their own rules), and tough to spark interest. They can, however, introduce fascinating new concepts.
- Game updates. These require new counters! AH won't fly them unless they are VERY good, as insertion in *THE GENERAL* will mean added counters. At best, they bring life to older games (e.g., Alan Moon's Coral Sea variant for *MIDWAY*). At worst, they're new games, and this magazine doesn't do those. In short, variant articles are not too good an art form. They're hard to make, must have airtight rules, and have heavy competition.

Series Replays are in great demand. As long as you don't break game rules or screw up unit coordinates, you'll probably get your SR into print. SRs do have one big drawback. You can wind up looking silly in front of the gaming community worldwide. It's nice if you're a halfway-experienced player.

I'll pass "miscellaneous" articles by. Those are limited by your own inventiveness, so you're on your own there.

I have one overall comment on text: Get to the point. Too much of it, in too many mss. and articles, are spent in side-trips. Follow a train of thought and build on it steadily. Any hot flashes can be boxed or illustrated elsewhere (see box).

Articles often get side-tracked in the introduction, right off the bat. AH wants you to introduce your article, not the game. You don't need to sell your article by selling the game; the whole article is one big commerical anyway.

The introduction should lead into what you want to say, and be short! Instead, this is what we often see:

"Avalon Hill's fantastic new Eastern Front game, *R&R ANVIL OF DOOM,* is the finest tactical simulation since its predecessor, *HIGHWAY TO THE REPERBAHN.* Its stimulating double-helix movement and multi-hex stacking does this, this and that, so forth, so on and on for a dozen sentences . . . " You get the idea.

A final note on your article submission. Be sure it is complete. This means proofing and editing, until you're sure you've honed it as sharp as can be. Don't send it in and then send errata after it. The wargame industry generates enough errata sheets; the mss. shouldn't add to it. One or two oversights are excusable; a ring-and-valve job (via air mail) is not.

That's about it. Get your "Guideline" sheet, crank up the old Smith-Corona, and get at it!

Good hunting. ☆

PRO GOLF

Professional Golf's Top Money-Winners:
here to re-create the
most famous tournament of them all!

Have you ever wondered how the game of professional golf is really played . . . how the best golfers in the world plan and execute their play on each hole . . . who are the best players on the tour?

PRO GOLF is more than just a sports game! It is a scientific in-depth analysis of the contemporary sport of golf. Golfdom's top money-winners have all been computer-analyzed and evaluated in ten different areas of play based upon their actual performances.

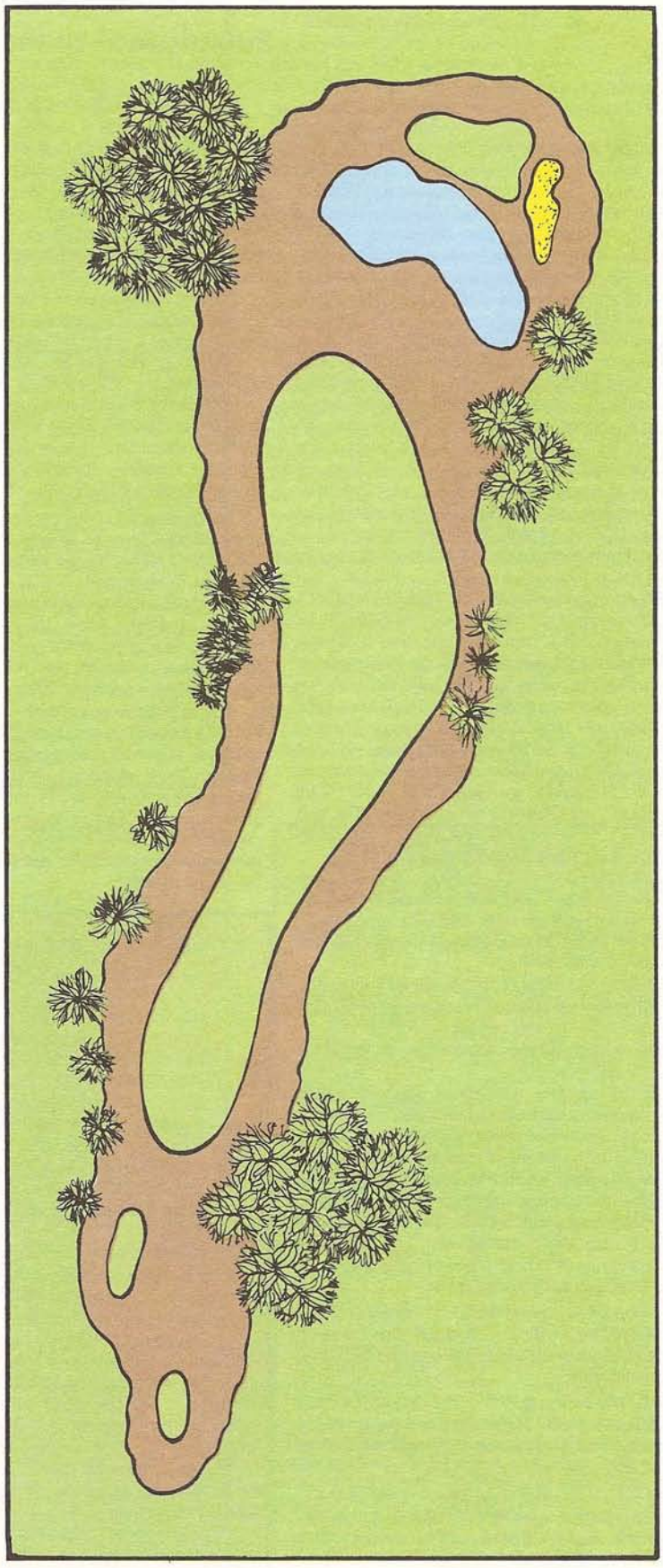
Are you partial to a golfer who'll blast the ball off the tee like a powerhouse . . . or one who'll keep the ball on the fairway as consistently as the year's top money-winner? You'll get to "play" golfers superb with their irons; many who'll put the ball on the green in two at any range. Others will be deadly once near the green, be it with a pitch, chip, or even out of the sand.

The fabulous putters are here . . . yours to "replay" in a realistic re-creation of the tense battle of nerves and skill that is professional golf.

PRO GOLF homes in on the **Augusta National** course—home of the famous **Masters**—the most prestigious tournament of them all!

Every hole at Augusta National is reproduced in absolute detail in the Course Book that is included in this package—in perfect scale; your guarantee that PRO GOLF is as authentic a re-creation of professional golf as is humanly possible.

PRO GOLF may be played either solitaire or by as many as 36 players at once. Like the real sport of golf, this simulation is not necessarily competitive in nature; instead, each golfer must play the course to the best of his ability while attempting to obtain the lowest possible score.
PRO GOLF plays extremely quickly. On each hole, the players simply roll two dice for every shot attempted by their golfers, resolving it by cross-referencing the location the ball occupies on the hole itself with the appropriate type of shot being attempted on the golfer's Player Card. The result will state precisely where this shot has landed and what will be required of the golfer on his ensuing shot. In cases where the ball has landed on the green, the number of feet between the ball and the pin is indicated. Of course, all sorts of unusual circumstances that may occur on the golf course are dealt with as well—such as water hazards, trees, bunkers, and adverse weather conditions.



PRO GOLF is available now for $11.00 from the Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214. Please add 10% for postage and handling (20% for Canadian orders, 30% for overseas). Maryland residents please add 5% state sales tax.

Letters to the Editor ...

Dear Don:

I have just finished reading Vol. 18, No. 3 and I want to make a few comments. First, I think you had better go and pour yourself a drink and relax; I don't think you will like what I am going to say.

I thought all the articles were great! I do not own *GUNS OF AUGUST*, but I found the articles on it interesting. Everything after that was just great. Now it is time for me to expose my true colors and tell you that I am one of the dreaded *SQUAD LEADER* players. Right away you no doubt want to stop reading, but I hope you go on; after all, I read all your letters.

My initial reaction when I turned the front page of *THE GENERAL* was disappointment. The first thing I saw was your advertisement on *STORM OVER ARNHEM*. I was disappointed not because I dislike the subject, but because I could not help but wonder on how much time, energy and resources went into this "new" production that could have gone into *G.I.: ANVIL OF VICTORY* instead. You no doubt will sell many of these new games, but do you think this will even be close to *G.I.*?

Profit is what is supposed to motivate business. It also draws competition. You have a big edge with the *SQUAD LEADER* series. Are you so naive as to think nobody else can take that edge away from you? Instead of exploiting your advantage by concentrating on the production of the *SQUAD LEADER* series, you are "pissing" it away by diverting your energy and resources to other productions. This allows your competition the time they need to move in and take your lead away—by either copying your product or offering something just as good.

I now turn back to my reading of *THE GENERAL*. Everything is great until I find your little note at the end of the Series Replay. I AM STUNNED! "Please be patient. The game will not be available before July 23rd, 1982!" Are you taking lessons from the Government? Can this truly be from the man who made *SQUAD LEADER* possible? What the hell is going on up there? Yes, I want the best game possible and I am willing to pay for it, but you must realize you are asking a lot by telling me to be patient when I see "crap" like *STORM OVER ARNHEM* and (a hundred times worse) *DOWN WITH THE KING* coming off the production line like "hot cakes". Why is Avalon Hill producing games the majority could wait for, and not producing what is in immediate demand? When I asked you this question at Origins, you told me you wished you could produce the *SQUAD LEADER* series faster, but you could not do everything you wanted to. Who is stopping you from doing your job? If you would tell me, I am sure we—the gaming public—could let him know how we feel about this obstruction and maybe change his mind.

I would go back to *THE GENERAL*, but everytime I look at that advertisement for *DOWN WITH THE KING*, I want to cry. WE WANT *G.I.* !

Thomas Norton
Campbell, California

By the time you read this your wait will be almost over. G.I. will be released at ORIGINS on July 23rd. As to why it took so long . . . there are many reasons, but basically you must realize that not everyone's taste in games is as myopic as yours. The world doesn't turn on the availability of SQUAD LEADER. There are thousands of gamers who could care less about an extension of the SL series, and are looking for something new. I saw that something new in STORM OVER ARNHEM and believed that I could serve more people's interests (read that "make more money") by working on that game. No one else at AH gives a hoot about SL. I am the only designer here who even knows how to play it! The others cringe at the very thought of being assigned to work on it; and, quite frankly, I needed a break from it to clear my mind. Working on the same project non-stop for five years is a good way to burn out whatever creative juices are still flowing. With a break from the system, I was able to reapproach old problems from a fresh perspective. Just as importantly, the time thus generated gave fans of the system an additional opportunity to point out flaws in the published games. I believe it is this slow approach to the design of the entire system which has made the game as popular as it is today. I wonder if you would have been so eager to see G.I. had I rushed through the preparation of CROSS OF IRON and CRESCENDO OF DOOM without allowing time to correct and improve on the contents of their predecessors. Perhaps the game system would be considered archaic by now had not such rigid time restraints been observed. Lastly, editing this magazine has been a major undertaking over the years which consumes a great deal of time that could otherwise be spent on game development. Avalon Hill has recently hired Rex A. Martin as my "understudy" with the hopes that he can take these editorial responsibilities away from me in time. Hopefully, the next installment in the SL saga won't be so long in coming.

★★★★★

Dear Mr. Greenwood;

Thank you for printing my article "TACTICAL LEVEL LUFTWAFFE" in (Vol.18, No. 4) of *THE GENERAL*. Regarding the article, I would like to add that the Luftwaffe receives the following replacements: After each Allied bombing raid (in the tactical mode there are two raids per quarter), the Luftwaffe player receives one replacement factor for every undestroyed aircraft factory. In effect, this is the same replacement rate as the Advanced and Tournament versions —only it occurs twice as often.

Also, the readers may note that under the TACTICAL COMBAT DAMAGE TABLE at the top of page 20, the ME109 and ME109 School columns have been misprinted. These should read: "2, 3, 4, 6" and "1, 2, 3, 5, 6" respectively. I hope that this might clear any confusion that the readers may have experienced.

Kenneth Erbey
Palmer, Alaska

★★★★★

Dear Don:

I'd like to point out several typos in my *"Gladiator"* feature which appeared in Vol. 18, No. 4 which might be causing your readers some concern.

Page 8, third column, second paragraph should read ". . . with the *arm* armor (*body area no. 4*) possibilities of a medium." In other words, the Retarius is reclassified as a 'light' (faster, with less armor) but given the arm armor of a 'medium' due to the massive manicia and galerus on his left arm.

The Table H chart on Page 13 was missing the symbol "greater than" (>) between "1" and "Table". Furthermore, in Table I, the word "Turn" should be omitted from the second of the three actions listed as "Rear/Turn/Adv." and the word "Avot" should actually read "Pivot".

Thomas Springsteen
Lincoln, Nebraska

★★★★★

Dear Don,

In a couple of your recent Reader Buyer's Guide analyses you have attributed the poor ratings of the mapboards to lack of terrain features. The games were *AIR FORCE* and *GLADIATOR*. I would like to suggest that these poor ratings are more likely due to the substandard quality of the boards themselves. Although *AIR FORCE*, *GLADIATOR*, and several other Avalon Hill games have recently been published with these rather flimsy mapboards, I have seen no comment in *THE GENERAL* as to why this is happening. I personally consider this new type of mapboard to be a poor substitute for your regular mapboard and, in fact, not much better than a cardstock mapsheet. As I have mentioned previously, if this change is to cut costs, I would just as soon pay more for the quality I've come to expect from Avalon Hill.

Roger Eastep
Poolesville, Maryland

You have a valid point which probably does indeed have an effect on the poorer mapboard ratings of many of the recently reviewed games. We have received other letters such as yours and passed them on to management—who continue to insist that the new style of mapboards is just as good as the old. They maintain that complaints of warping are exaggerated and brought about by neglect, as their test copies have not warped. Only a deluge of letters to the contrary or a general down turn in sales is likely to change their minds.

Dear Sir,

In regard to the just published solution to Contest #103, I totally disagree with the Allied unit placement as well as the associated analysis. This solution ignores overall campaign strategy as well as two rules that apply only during the August 1914 turn. First, German combat units get a second movement phase. Second, French combat units that begin their combat phase in a German ZOC must participate in an attack. The given Allied placement allows the Germans first to AV the Dutch, thereby enabling enough units to move up next to both Antwerp and Liege to guarantee their capture in August 1914. The second movement phase is now utilized to advance adjacent to the entire French line, including Lille and Calais. Thus, the French must make more attacks in this turn than normal, especially if there is no British entry, which can seriously weaken the French defense prior to the upcoming German combat phase (September 1914). This situation also allows the German to begin attacking the Lille/Calais area sooner than normal (supplied thru Antwerp and Liege). Therefore, it is insufficient to consider only limiting German first movement advances; rather, the placement of the Dutch and Belgians must look to minimizing not only German second movement phase advances but restrict them even in subsequent turns.

Any Allied defense, when using the optional AV rule, must be predicated on holding Antwerp as long as possible. The solution I submitted placed three 3-5-3s in Antwerp, the 1-1-4 in Liege while the Dutch occupy K7 and L7. Now, Antwerp can be attacked from only two hexes with a very small mathematical chance of being captured in August 1914. The Dutch unit on K7 cannot be AVed and may survive to serve a useful purpose. The fact that Liege is not AV proof is meaningless. One might argue that this opens the French line to additional first turn attacks, but this is not really true. Analysis of possible German set-up hexes, movement allowances, terrain, and the need to attack Antwerp strongly prevent any meaningful German incursions against a competent French defense. The retention of Antwerp provides the Allies the mechanism to delay the German advance.

Claude J. Drong
Spring Grove, Illinois

Mr. Beyma replies:

This is a good defense. The placement of a Dutch unit on hex K7 is clever. Even though the prospects of additional German attacks on the French line do not seem great, there is some risk in allowing them at all. (See the analysis of an opening attack on France in an upcoming issue of THE GENERAL). Also note that Germany will not have to invade Holland using this setup. They can successfully negotiate Belgium without a flanking maneuver through Holland. There is a 50-50 chance of eliminating two or more Belgian 3-5-3s by direct assault. (Actually, one assault combination yeilds a 55.5% chance.) The remaining 3-5-3 could be AVed in the second impulse. Alternatively, the Germans could eliminate one 3-5-3 and the Dutch units on the first impulse and then AV two 3-5-3s on the second impulse. (Theoretically, the Germans could stack 82 factors on the five hexes adjacent to Antwerp.)

A slightly less advance by the German probably won't result in less French attacks. The French player normally advances up to the German line in order to acquire as much buffer territory as possible. In certain respects, the French like for the Germans to advance up to I8 and J10 since it gives the French player two three-hex counterattacks. In the final analysis, I would rate this defense as good as the contest solution —although it is not quite as strong as Mr. Drong believes. The tactical placements are very good, although they have a couple of the aforementioned liabilities. This defense would be particularly effective if the French deploy heavily in northern France.

★★★★★

Dear Mr. Greenwood:

If I may, I would like to contribute my thoughts to the interesting debate sparked by Mr. Morss's letter (Vol. 18, No. 2). The relative merits of wargames versus chess is a question which has intrigued me for some time.

It seems to me that the basic test of a game's worth is the variety of constructive plans which it offers the antagonists. As old as it is, chess has so far denied a perfect solution. Whether or not high-powered computers will succeed in finding one remains to be seen.

The great Cuban world champion, Jose Capablanca, pointed out that the entire opening theory of chess would be rendered obsolete simply be reversing the initial positions of the bishops and knights. The movement capabilities of the pieces can remain the same, but a radically different set of problems emerge.

I believe that wargames such as *SQUAD LEADER*, which have developed into very flexible game systems, compare favorably with chess. One is not better than the other. Each has its own creative dynamic, its own aesthetic.

I applaud those who analyze wargames seriously. It is a fascinating activity.

David Tobert
Trenton, New Jersey

★★★★★

Dear Mr. Greenwood:

First a word of encouragement. I have been very pleased with the new format. Forty-eight pages gives plenty of room for a major concentration plus any number of other articles. Good work. Unfortunately, my December issue arrived in February. I know about the lack of staff and the difficulties in getting press time (worse than battery access apparently), but three months is a long time to have to wait for one's favorite magazine.

Now a constructive idea! *G.I.* is allegedly due out this summer. I assume the counter sheets have not been printed yet, since playtesting is apparently not completed. How about a contest, featuring some aspect of the *SQUAD LEADER* system, in which the usual ten winners get commissioned? By now, just about everyone at AH (down to the custodians no doubt) has his name on a counter or map. This contest would give some of the faithful a chance to be immortalized in cardboard. I for one would love to see my name on a leader counter; with no prejudice to hide, I would even accept a commission in the Italian Army. (Imagine Capt. Fullertoni leading the attack against the Allied invasion; with good leadership, who knows where they might go?)

So, how about it?

Michael Fullerton
Middlesex, Vermont

Despite appearances, we recognize the worth of a unique idea when confronted with one. Mr. Fullerton, and the rest of the SL enthusiasts, should heartily approve of Contest #106 found in this issue; besides the usual credit towards AH merchandise, each winner will find his name on a leader counter in the final version of G.I.: ANVIL OF VICTORY. Nor will they be forced to accept comissions in the Italian Army (which will not be included in G.I.), but rather will appear as American officers. The contest, detailing the last game turn of a Russo-German scenario, is to be found on Page 23. Be forewarned; to truly weed the leaders from the chaff, the contest is supremely challenging.

★★★★★

Dear Mr. Greenwood:

I recently received my Nov.-Dec. issue of *THE GENERAL* and was pleasantly surprised to find my article on *FORTRESS EUROPA* in it. I noticed several editorial changes that were made, and most improved the article. However, two changes produced errors. I.4 should read: "A single HQ, RGR, CDO, artillery, 150SS, or battalion-sized unit has no ZOC. A single division, regiment or brigade does, as do two of the above units in the same hex." And IV.5 should read: "Allied paratroop brigades and regiments count as half a division for airlift and paradrop. Each unit in a drop must be within 3 hexes of another dropped unit, as before, and no two dropped units may be more than 7 hexes apart." The latter restriction was inherent in the old limits of 3 hexes between units and 3 units maximum. Now that more than 3 units may drop, it must be imposed separately to avoid ridiculously spread out drop patterns.

Jim Eliason
Cambridge, Massachusetts

MIDWAY

Q. Is it legal to attack a position and, after learning what is there, call off the dive bombers and torpedo bombers without attacking but engage in fighter-fighter combat solely?
A. Yes—though even the fighter engagement is not mandatory.

Q. When ships are sighted, what information must be revealed?
A. Only the type of ships present: carrier, battleship, cruiser. No numbers or identification need be given.

Q. Assume surface combat lasts longer than four turns; what happens to any forces entering the square where the opposing sides are locked in combat?
A. These would enter the battle from the last row of rectangles and maneuver normally.

SOURCE OF THE NILE

Q. Can lakes be partially explored?
A. No, lakes are never partially explored, since lakes are a minimum of one hex in size.

Q. May donations be collected if the explorer is in an African port?
A. No, donations may only be collected while the explorer is in Europe.

The Question Box

Q. Are all hexes yet to be visited by an explorer considered unknown to him even if they have been published?
A. No, published hexes are known to all. Only unpublished, unvisited hexes are unknown to an explorer.

Q. In a turn where there is interaction with natives, exactly at which point may the explorer search for a cache?
A. Caches are located only after any interaction with natives.

Q. May there be more than one tribe in a hex?
A. No—10.41 is incorrect. Once a tribe has been discovered in a hex, no other discovery attempt may be made in that hex.

Q. Is there an error in the 'lost' modifiers on the mapboard?
A. Yes. The modifier for having a guide is +1. The modifier for choosing reckless activity is -1.

Q. Can an expedition following a river downstream become lost as a result of disaster?
A. No, an expedition moving downstream can never become lost.

VICTORY IN THE PACIFIC:

Q. If Pearl Harbor is captured, does its repair capability continue to increase per the turn record chart?
A. Yes.

Q. If all British 0-2-7 CVs are sunk but the *Hermes* is still in play, must it be removed in place of a 0-2-7 CV to be withdrawn; or may any British ship be substituted?
A. Any British ship.

Q. While on loan to the USN, the *Victorious* arrived in Pearl Harbor and then operated in the South Pacific. Is it exempt from movement restrictions imposed on British ships?
A. No.

Q. If Pearl Harbor is Japanese controlled, the *Victorious* enters at Samoa, but according to 10.13 *must* return to Pearl Harbor and would therefore be lost per 10.14. What should happen?
A. If Pearl Harbor is Japanese controlled, the *Victorious* enters at Samoa but returns to any British port. In Rule 10.13 change "must" to "may".

Q. What happens when a marine unit lands on a base that is surrounded by enemy-controlled sea areas?
A. When the marine lands, he gains control of that island base. However, if the enemy still controls all the surrounding sea areas at the end of that turn, then the island base reverts back to enemy control. Gaining bases by control of the sea follows gaining control of them by invasion, and thus overrules any gains made by invasion.

Q. Does land-based air deprived of their base really have to return to a port?
A. Yes, although barring poor play it is irrelevant, as long as it returns to a port which cannot be the subject of a raid during that turn.

Q. Are amphibious units sunk when damage equals their damage factor?
A. No, it must exceed their damage factor.

Q. If Pearl Harbor (or any base with a repair capability) is captured and there are enemy ships "on the bottom", may these ships be destroyed by the occupying player?
A. Yes.

Q. The rules state land-based air units are based in ports; however, the mechanics of play usually make this irrelevant. Are air units supposed to be based in port?
A. Yes.

READER BUYER'S GUIDE

TITLE: FLAT TOP $22

SUBJECT: Carrier Operations in the Pacific Theater, 1942

Reflecting the extensive effort expended on the revision of *FLAT TOP* by Alan Moon and his fine cadre of playtesters, and despite a disappointing response by readers to this survey, the game placed ninth in our RBG poll. In combination with *FLAT TOP*'s current ranking among the games our readers have been playing recently (see Page 42 of this issue), this represents a truly impressive showing for this latest release.

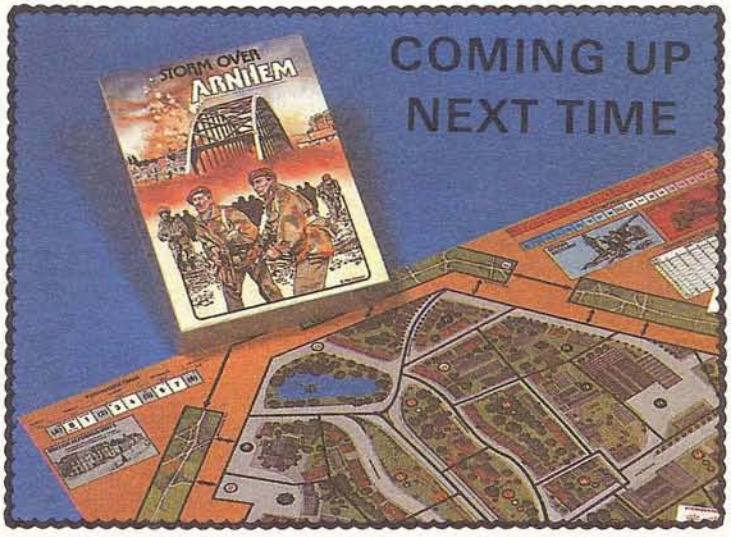
Ranking above average in seven of the ten categories, *FLAT TOP* is the perfect investment—for the *serious* gamer. Reversing recent trends, *FT* was judged better than average in the Physical Quality, Mapboard and Components listings (respectively, 1.74, 2.51 and 2.37). In Play Balance and Overall Value, the game also proved more popular than many. Surely, the most impressive of the survey results were the ratings for Realism and Excitement Level (both 1.81), unusual for a strategic game of such complexity.

Only in Ease of Understanding (3.85) and Completeness of Rules (3.00), did *FLAT TOP* fall short of the mean—not surprising in view of an avowed Complexity Rating of **10** on the Avalon Hill scale. And, as Mr. Moon stresses in his lead article, he redesigned *FT* for "the hardcore gamer and . . . [forgot] . . . about trying to present rules for the novice."

It should be noted that the rating of 106.9 for Game Length reflects the response to the *longest* scenario only. The shortest scenario, in the results of our survey, averaged a trifle over three hours playing time. Thus, with *FLAT TOP*, players may spend a leisurely evening—or an entire weekend.

1. **Physical Quality** 1.74
2. **Mapboard** 2.51
3. **Components** 2.37
4. **Ease of Understanding** 3.85
5. **Completeness of Rules** 3.00
6. **Play Balance** 2.56
7. **Realism** 1.81
8. **Excitement Level** 1.81
9. **Overall Value** 2.11
10. **Game Length** ..... 17 Hrs. 48 Min.

Note that *FEUDAL*, adjudged a member of the Leisure Time Game line, has been dropped from the RBG Chart.



AVALON HILL RBG RATING CHART

The games are ranked by their cumulative scores which is an average of the 9 categories for each game. While it may be fairly argued that each category should not weigh equally against the others, we use it only as a generalization of overall rank. By breaking down a game's ratings into individual categories the gamer is able to discern for himself where the game is strong or weak in the qualities he values the most. Readers are reminded that the Game Length category is measured in multiples of ten minutes and that a rating of 18 would equal 3 hours.

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. CRESCENDO OF DOOM	2.04	1.93	1.64	2.33	3.20	2.31	2.18	1.36	1.56	1.82	19.5
2. CROSS OF IRON	2.17	2.09	2.04	1.88	3.37	2.52	2.44	1.60	1.69	1.94	20.5
3. RUSSIAN CAMPAIGN	2.24	1.98	1.85	2.02	2.24	3.07	2.78	2.41	1.78	2.07	28.5
4. SQUAD LEADER	2.25	1.97	1.85	1.82	3.58	2.94	2.36	2.02	1.82	1.92	13.6
5. CIRCUS MAXIMUS	2.27	2.53	2.13	2.93	2.27	2.33	1.13	2.26	2.14	2.28	11.6
6. W.S. & I.M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
7. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
8. BISMARCK	2.37	2.16	3.00	1.69	2.97	2.63	2.72	1.84	2.09	2.31	18.8
9. FLAT TOP	2.42	1.74	2.51	2.37	3.85	3.00	2.56	1.81	1.81	2.11	106.9
10. WAR AND PEACE	2.43	2.37	2.32	2.54	2.34	2.56	2.61	2.54	2.29	2.32	17.0
11. FORTRESS EUROPA	2.44	2.21	3.29	2.57	2.50	2.64	2.43	2.35	1.93	2.07	44.1
12. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
13. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
14. CAESAR—ALESIA	2.53	2.92	2.71	2.78	1.71	1.85	3.36	2.64	2.71	2.07	27.9
15. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
16. PANZERBLITZ	2.58	2.00	3.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
17. KINGMAKER	2.60	2.26	2.84	2.34	2.83	3.07	1.86	3.65	2.14	2.41	20.2
18. DIPLOMACY	2.60	2.35	2.26	3.13	1.87	2.39	2.09	4.57	2.30	2.43	32.6
19. THIRD REICH '81	2.62	2.31	2.29	2.58	4.27	2.61	2.64	2.81	1.94	2.15	45.9
20. CAESAR'S LEGIONS	2.64	2.32	2.36	2.31	2.14	2.23	3.73	3.05	2.86	2.73	13.5
21. SUBMARINE	2.65	2.58	3.48	2.42	2.90	2.87	2.55	2.38	2.22	2.47	12.1
22. STARSHIP TROOPERS	2.67	2.27	3.11	2.07	2.43	2.70	3.57	3.39	2.20	2.32	17.3
23. ARAB ISRAELI WARS	2.68	2.34	3.03	1.86	3.31	2.70	3.57	2.31	2.51	2.52	13.5
24. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
25. VICTORY—PACIFIC	2.70	2.47	2.36	1.85	2.21	2.79	3.38	3.91	1.94	2.53	18.0
26. DUNE	2.76	2.45	2.40	3.00	1.98	2.43	2.75	4.20	2.80	2.83	11.9
27. NAPOLEON	2.77	2.04	2.96	2.03	2.25	2.86	3.25	4.18	2.46	2.89	9.1
28. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
29. The LONGEST DAY	2.83	2.23	2.60	2.40	3.20	3.53	3.30	2.28	2.80	3.15	171.
30. JUTLAND	2.83	2.84	—	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
31. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
32. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
33. GLADIATOR	2.88	2.84	4.00	2.47	2.89	2.63	2.79	3.05	2.53	2.74	4.6
34. AFRIKA KORPS	2.90	3.04	3.10	2.92	2.12	2.29	3.39	3.57	2.91	2.77	13.5
35. FURY IN THE WEST	2.91	3.36	4.01	3.00	2.55	2.45	2.99	2.82	2.09	2.91	17.8
36. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
37. GUNS OF AUGUST	2.93	2.71	2.94	3.03	2.41	3.15	2.96	2.89	3.38	2.87	27.8
38. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.00	2.22	4.00	4.06	3.11	3.40	9.6
39. WIZARD'S QUEST	3.03	2.63	2.21	3.25	2.62	2.60	2.23	5.13	3.42	3.21	13.2
40. CRETE—MALTA	3.04	2.80	3.10	3.00	3.03	3.05	3.43	3.18	2.76	3.05	18.8
41. GETTYSBURG '77	3.04	2.52	2.48	2.50	4.32	3.79	3.07	2.46	3.02	3.21	27.6
42. D-DAY '77	3.07	3.72	4.54	3.69	2.19	1.94	3.00	3.19	2.94	2.44	20.2
43. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
44. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.6
45. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	3.27	4.32	3.21	3.01	16.2
46. WAR AT SEA	3.21	3.18	3.96	2.74	1.74	2.35	3.73	5.12	2.93	3.15	6.9
47. AIR FORCE	3.43	3.77	4.94	3.79	3.69	3.29	2.42	2.81	2.77	3.40	9.6
48. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
49. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
50. MAGIC REALM	3.54	2.74	2.81	3.13	5.29	4.42	2.80	4.06	3.39	3.26	19.9
AVERAGE	**2.76**	**2.57**	**2.84**	**2.56**	**2.84**	**2.75**	**2.93**	**3.04**	**2.54**	**2.63**	**23.4**

Certainly not the best showing, Vol 18, No. 4 polled a rating of 3.66; in the past year, only Vol. 18, No. 1 was rated lower. Indicative of reader response to the issue was the fact that Thomas Springsteen's lead article on *GLADIATOR* polled only 270 votes. The totals for the other features, based on a random sample of 200 responses, were as follows:

HOME BEFORE THE SNOW FALLS	229
TACTICAL LEVEL LUFTWAFFE	185
THE WISDOM OF THE ARENA	147
SQUAD LEADER SURVEY	111
SQUAD LEADER CLINIC	110
AIR DROP ON CRETE	34
BACK TO BASICS	31
ON TO BERLIN	22
SCENARIO L	14
AVALON HILL PHILOSOPHY	13
THE ASYLUM	13
STAFF BRIEFING	10
BRITISH STRATEGY IN WAS	6
ASSAULT FROM THE AIR BY MAIL	5

We are currently in need of by-mail playtesters for *GLEAM OF BAYONETS.* This is to be a regimental-level, standard-hex recreation of the First Battle of Bull Run in a modified style of the "classic" wargame. Prospective testers must be at least 21 years of age and willing to devote a lot of their leisure time to playtesting for the next few months. Emphasis will be on evaluating play balance, game appeal and historical accuracy. The playtest kits will be ready shortly, so prospective playtesters should contact the editors as soon as possible. Remuneration is limited to free copies of the finished game for those who prove of value in the completion of the playtest.

For years I have been appalled by the casual butchery of a beautiful tongue at the hands of historians and wargamers alike. Now Ms. Beard and Mr. Roehl step forward with consummate skill, at a very opportune moment in light of this issue, to correct this fault among our readership. Their article, "Blitz Japanese", merely confirms the fact that many gamers have skills and talents in other realms which can contribute to our enjoyment of the hobby. The editors of *THE GENERAL* encourage those among our readers who can elegantly enlighten us on the esoteric aspects of our games to put pen to paper. Tenets for submission of articles can be found in Mr. Harmon's "It Is Written" in this issue.

From Florida comes news of the first SUNCON, a convention to be hosted by the Wargamers Module and the Army ROTC of the University of Miami. Organizers have centered a number of events on Avalon Hill games: the *SQUAD LEADER* series, *CIRCUS MAXIMUS, KINGMAKER, MACHIAVELLI, DIPLOMACY, WOODEN SHIPS & IRON MEN, TOBRUK, RICHTHOFEN'S WAR,* and *THE RUSSIAN CAMPAIGN.* A first-rate opportunity for players from the Deep South to gather, the SUNCON will be held on 14-16 May. For those desiring more information, write to SUNCON HQ, University of Miami, P.O. Box 248166, Coral Gables, FL 33124, or call (305) 284-4675.

Avalon Hill developer Frank Davis recently left our employ to take a position with Parker Brothers as a game designer. This probably means that his latest design, *RED SKY AT MORNING,* will be long delayed (if published at all). Nonetheless, we wish Frank well as he embarks on a career in the major leagues of the game field.

Infiltrator's Report

The classic sports game *GO FOR THE GREEN* has now been placed on our "endangered species" list. Effectively, sales of the game are limited to copies in stock; the collector's item price for *GO FOR THE GREEN* is $25.00 plus 10% for shipping and handling.

The recession has taken its toll on the Adventure Gaming industry. The latest casualty was one-time industry leader SPI which has been sold to another company. However, many of the personnel of SPI will remain in New York where they will form the basis of a new game company under the aegis of Monarch-Avalon—the corporate owner of Avalon Hill. The new company will be known as Victory Games and operate under the direct supervision of long-time SPI designer and developer Mark Herman who, in turn, will report to Tom Shaw. Victory Games will enjoy the benefit of Monarch's fine printing, assembly, and overall production methods while maintaining its own unique design style. This should be welcome news to fans of SPI-style simulation games. A more in-depth report on the proceedings at Victory Games will follow in the Philosophy section of the next issue of the *GENERAL.*

Readers who plan to utilize our Opponents Wanted section are reminded that a nominal remuneration for this service is required and must accompany their form. Further, games by publishers other than Avalon Hill will not be listed and will be excised before the advertisement is printed.

THE BROADSIDE, the only magazine devoted entirely to naval gaming, has been refloated under a new editorial group after a brief period in dry dock. Contained in its pages are game reviews, strategy articles, interviews with game designers, historical commentary, hobby news, and more. Some PBM games are also run through the magazine, including *MIDWAY, SUBMARINE,* and *WSIM.* A subscription is $7.00 for six issues (bi-monthly) and is available from Richard E. Snitzer, 527 East Double Street, Carson, CA 90745 (213-549-6277). Highly recommended for naval buffs.

In spite of its name, *THE BUZZARD'S BREATH* has entered its sixth year of publication. The emphasis of the "'zine" is on postal play of *THIRD REICH,* acting as gamemaster to thirteen continuing multi-player games and offering *3R* PBM sheets and reduced maps. But the most intriguing feature of the publication is most surely the largest PBM *SOURCE OF THE NILE* game currently in existence and reported on in every issue. Readers desiring a sample of *THE BUZZARD'S BREATH* need send only $.50 to Mark Matuschak, H106 East Campus, Columbia University, New York, NY 10027.

Richard Gutenkunst, the counter cutter for "Desert Deception" and "Stepping Stone To Suez", has been experimenting with *STARSHIP TROOPER*-type counters (with the help of original artwork supplied by Avalon Hill). Perhaps you have an idea for a *SST* variant and are frustrated by lack of hardware (special counter requirements)? Richard would like to hear from you. As an experiment, he has produced the variant counters for "Saga of the Bug Wars" which appeared in Vol. 13, No. 6 of *THE GENERAL*. These can be had from him for $1.00 plus a stamped, self-addressed, 6 1/2" by 3 5/8" envelope. His address is P.O. Box 3301, Traffic Station, Minneapolis, Minnesota 55403.

John E. Shanahan Jr. of North Tonawanda, NY approached perfection with his attack and defense allocations for the gladiator in Contest 104. The other nine winners were: D. Ang, Bakersfield, CA; D. Burgermeister, Milwaukee WI; J. Burnett, Clinton TN; J. Denton, Palos Verdes CA; T. Doupnik, Richlands VA; B. Evans, Enid OK; D. Maurer, Newark, NY; R. O'Neil, Houston TX; and C. Westbrook, Athens GA.

In response to the situation outlined in Contest 105, the Allied player must curb his natural *elan.* True, the Allies could redress the situation by attacking the German armor adjacent to Paris at 1:1 odds (25:16); but it is at best a move of great risk. Instead, the better method for the Allied player to pursue in order to ease the pressure is to select an Attrition Option, resolved on the 41-50 column. If the die roll allows the Allies to take two or more hexes, he should select O23 and O24. This will doom the two enemy armored units on O23—the defender can retreat his units only one hex (18.33) and may not retreat into a hex selected for advance by the attacker (18.34). Since all other adjacent hexes are occupied by Allied units, the two 4-6s have no retreat route and are eliminated. The same method, should the roll permit such, is utilized to isolate or eliminate the armored spearhead on the coast; select hexes M24 and M23.

The enemy armor unit in R21 is out of supply and, even if it exploited last turn and could advance to Paris for an attack, it cannot make an exploitation attack (14.38). If the German armor is pushed out of O23, this lone 4-6 could not combine its attack with the northern armor. Thus, the Allies have a 50% chance to ensure that Paris cannot be attacked by more than two panzer units during Summer 1940, while incidentally saving most of the Allied units threatened by elimination due to isolation.

The proper Allied response to the problem posed: Attrition Option, 41-50 column with priority of hexes, O23, O24, M24, M23. For those players who opted for an offensive, it is suggested that they peruse Mr. Anchor's article entitled "The French Campaign" in the next issue of *THE GENERAL* in which the author deals with this situation in greater detail.

OPPONENTS WANTED

Need ftf opponents for SL, COI, COD, TLD and 3R. Allen Womack, 917 Alford Ave., Birmingham, AL 35226, 823-7349

Adult gamer wants AREA rated pbm competition in BL, BB, DD, STAL, 3R and WAT. All letters answered. Scott Peth, 103 Nelson Cr., Ft. Hugchuca, AZ 85613

Wanted: players for DD'77, will also play AL, WAS. Please pbm only! Need systems for AL and WAS. Andy Delaix, 7921 Tuscany Dr., Tucson, AZ 85704, (602) 297-6514

Two mature Orange county gamers need good ftf opponents. We will teach or learn any board game. Would also like to organize weekly gaming club. Scott Jewett, 1900 E. Almont #64, Anaheim, CA 92805, (714) 776-5152

LW opponent wanted. Don Muncy, 20932 Trigger, Diamond Bar, CA 91765, (714) 598-8665

Wanted! Journeys of St. Paul, Year of the Lord, Lemans (1st or 2nd edition) and U-Boat (early edition). Good condition please. Major Sam Wilson, 243 Ardennes Circle Rd., Fort Ord, CA 93941 or call collect (408) 394-4660

Regular army officer AREA 1200 (prov.) wants pbm opponents for AK, BB'81, TRC, FE, and/or ftf PB, PL, SL, AIW. Prefer rated games. Anyone interested? Major Sam Wilson, 243 Ardennes Circle Rd., Ft. Ord, CA 93941, (408) 394-4660

Seeking adult competition in Santa Clara County and San Mateo County. SL, COI, and COD. Also DIP. Call after 6:30 p.m. Richard Anderson, 530 Yosemite Ave., Mountain View, CA 94041, (415) 969-0582

Anyone in Southern Calif play Mr. President? Also DIP. Open to other games. Prefer ftf. Lenard Davis, 10 Goodwill Ct., Newport Beach, CA 92663, (714) 649-3066

Wanted: AREA rated 900 or less pbm opponents for AK, old BB, BB'81, D-Day, PB. For fun pbm PL, STAL. My rating 368BCF. Marcel R. Carbonneau, 1924 S. Broadway, Oceanside, CA 92054

Opponents wanted for BB, AK. Information on local wargaming clubs desired. One year experience. Pbm also. Jon Clairmont, 7800 Woodman #84, Panorama City, CA 91402, 994-2007

Need pbm AREA opponents for AZ and BB'81. I am 1200 provisional. Prefer other prov. members. Will learn other games. Dave Bergman, 919 Santa Dorotea Cir., Rohnert Pk., CA 94928, (707) 585-1983

Wanted pbm opponents for PB area only. Rated about 1000. Reliable players only! F. Lewandowski, 3824 Centre St., Apt. C, San Diego, CA 92103, (714) 295-6270

The National Wargaming Alliance is run by gamers for gamers. For a free sample of our journal and general information write to: Steven Duerr, 6433 Bradford St., San Diego, CA 92115, (714) 583-3947

Ftf games wanted for SL, COI, 3R, COD. Travel constantly. Stationed at Barbers Pt. Hawaii. Martin Johnson, VP-22, FPO S.F., CA 96601

Fight with the best! AF/D campaign now open for new blood. Pacific theater. For details contact: K. G. Conkle, 10549 Wilsey Ave., Tutunga, CA 91042, (213) 353-0329

AREA rated, looking for pbm system and opponents for SL, COI, COD. Jim Ricketson, 2751 29th Ave., Apt. B, Greeley, CO 80631, (303) 330-0245

I am a young novice seeking a compatible opponent of any age for PL or AIW. I will learn any other wargame. I play ftf. Mike Trevithick, 319 Midnight, Pueblo, CO 81005, 561-3734

Wanted young rated opponent to play AZ, pbm or AZ, DD ftf, I'm 14 and rated 600. Nick Sebrell, 25 Libby Ln., Darien, CT 06820, (203) 655-4926

14 yr. old, 3 yrs. experience. Wanted ftf opponents for 3R, SL, COI, COD, many others. Any clubs in Norwich area? No pbm, ftf only. William Rober, 218 Laural Hill Ave., Norwich, CT 06360, (203) 889-3208

Wanting to play TLD over a 3 day weekend at my home. Bring sleepin bags. For further details send SASE or call: John Brownawell, 18 Hackberry Dr., Felton, DE 19943, (302) 284-3835

Serious AREA prov. 1500 wants rated pbm SL, RW. Swap sides 2nd game. Mike Rizzo, 11175 N.W. 38th St., Coral Springs, FL 33065

Pilot's wanted multi. player DL. Timed moves. Attack on Atoll IAAJ base. Fly four aircraft fighter, bomber/both. State side wanted. Using Battleline rules modified. Dennis Demory, 593 Flo Mich St., Holly Hill, FL 32017

Wanted: ftf opponent for STAL, TRC, W&P, FE, GOA, have others. Any clubs? Jeff Kramer, 1340 Golfview Dr., East, Pembroke Pines, FL 33026, (305) 431-5896

Ftf TRC, WAS, VITP open to options rules, either side. Also know how to play old STAL and BB, D-Day. Gary McCarthy, 24 N.W. 43rd Ct., PomPane Bch., FL 33064 943-9504

Adult gamer wants pbm or ftf of FE or TRC. Also ftf of SL, COI, COD, VITP, RW, SST. Interested in finding local club. John Curley, 1300 Nylic St., Apt. A, Tallahassee, FL 32304, (904) 222-4023

Opponent wanted for ftf AREA game of 3R, SUB, CM, or SL. Also pbm games of DIP, KM, or PB. Rated 1550+ only. Richard Lowenthal, 420 Spaulding Dr., Atlanta, GA 30328, 393-8228

Wargamers in Macon and Warner Robins Ga. area identify yourselves. Also starting up pbm, DIP, game. Send SASE to: Ricky Maxwell, 427 Story Rd., Warner Robins, GA 31093, (912) 922-8260

Very average adult gamer seeks pbm opponents for jet air combat games. Likes make-your-own scenarios that aren't too complex. Bill Retoff, RR 2, Box 6, Minonk, IL 61760, (309) 432-2145

Experienced adult gamer wants opponents for pbm games of SL, COI, COD. Finishers only. Russ Wood, 331 Alice Ave., Oglesby, IL 61348, (815) 883-3581

Wanted, pbm opponents for rated or unrated games of FT, WSIM, SL, 3R. Am rated 1200 prov. will play all who dare to challenge. D. Truckenmiller, RR1 Box 71A, Sibley, IA 51249, (712) 754-3159

Non-rated adult gamer seeks opponents, rated or not, for pbm AK, BB, STAL, WAT. Some ftf Wichita area possibly? Dan Keirns, 1723 Westfield, Wichita, KS 67212, (316) 721-3342

13 year old gamer seeks opponents for AF, DL, GE'77. Will play anybody ftf. Doug Stewart, 6208 Milmar, Alexandria, LA 71301, (318) 448-8186

Adult needs opponents, ftf most AH wargames and/or pbm. I will pay for both kits and stamps if need be! SL, WSIM, AF, PB, etc. Dennis J. Greene, PSC Box 929, Room 101, England AFB, LA 71301

14 yr. old gamer with 3 yr. exp. seeks ftf opponent in SL, COI, COD, VITP, DL, DD, 3R. Will learn many others. James Ott, 4836 Bissonet Dr., Metairie, LA 70003, 888-1483

Ftf or pbm AREA rated games. I am provisional 1500. Prefer 3R, TRC, FE, VITP, and LUFT, but will play almost anything. Prefer mature gamers. Capt. John A. Barham, 3200 Rue Parc Fontaine #3727, New Orleans, LA 70114, (504) 392-9085

Prov. 1200: AREA rated pbm STAL, LUFT, SL, GUAD, D-Day, AZ, WSIM, AF. Also rated ftf games. Will moderate pbm. Rated JU, MID, BIS, SUB. Bill Lindow, P.O. Box 253, Foxboro, MA 02035, (617) 384-2673

Adult gamer w/20 yrs. experience, but not AREA rated. Ftf or pbm opponents wanted for AZ, COD, 3R, 1914, TLD, LW, FT and more. Interested in clubs. Lindsey M. Murillo, 9212 Oswald Way, Apt 3-D, Baltimore, MD 21237, (301) 686-2062

Unrated veteran adult wargamer seeks pbm opponents for AK, BB, CAE, STAL, TRC, WAT. Prompt; all letters answered. Greg Starks, 15F Nutmeg Knoll Ct., Cockeysville, MD 21030, (301) 628-0623

OPPONENTS WANTED

Desperate for opponents ftf, pbm. AZ, BB (either), SL, COI, COD, KM, VITP, WSIM, many others. I'm 25 and unrated. all letters answered immediately. Onnie L. Duvall, 312 Leyton Rd., Reisterstown, MD 21136, 833-3073

Wanted opponents ftf for AF, FT, KM, WS&IM, MR, SL, COI, CM, COL, VITP, 3R, PL. Also want to start club. Call. Thomas Nar, 2211 Prichard Rd., Wheaton, MD 20902, 933-4734

Wanted ftf opponents for 3R. Will teach if willing to learn. Also GOA, W&P, CAE, 1776, others. Michael Phebus, 1313 Lakeview Dr., Portage, MI 49002, (616) 327-8717

Need serious ftf opponents. I will teach or learn any game. 26 yrs. old, gaming 6 yrs., prefer 3R, TRC, STAL and DD. Jeff Gay, 16955 Ziegler, Taylor, MI 48180, (313) 281-0957

24 yr. old, 1200 prov. wants pbm DD, AK, BB, STAL, BL, TRC, ftf SL, COI, COD, PL, 3R rated or non-rated. Will play others. Francies G. Biss, Apt. 210 404 Sch. Str., Waynesville, MO 65583, (314) 774-2547

Adult gamer wants ftf opponents in the Flathead Valley area if any exist. Name the game. SL to MR, WSIM to DWTK. Jim Gustafson, P.O. Box 1004, Kila, MT 59920, (406) 257-1004

Wanted gamer not joker. Will play anything. Would like to play BIS, CAE, RW, FE, GOA, KM, MD, SST, 3R, VITP, WAS, and especially DIP. Joseph Gaer, 1756 Morris Dr., Cherry Hill, NJ 08003, 795-3213

14 yr. old beginner desperate for players, BL, CL, PB, TAC, W&P, pbm DIP for fun willing to learn new games. Help! Paul Smolinsky, 3 Ferndale Rd., Madison, NJ 07940, (201) 377-1714

Adult AREA rated 1200 seeks rated opponent for pbm in AK, DD, FE, TRC. Also ftf AOC, CAE, CL, GOA, TLD, W&P. Mike Riley, 6 Inverness Dr., Old Bridge, NJ 08857, (201) 679-1688

Have increased game inventory 150%! Ftf KM, DD, BL, PB, TRC. Would like to play SOA, CM. Transportation very limited. Veterans need not reply. Peter Martin, 210 Melrose Ave., Palmyra, NJ 08065, (609) 829-8158

18 yr. old seeks opponents to play ftf 3R, GOA, TRC and other games. Play for fun not blood. Michael H. Chris, 612 S. Manetta Dr., Pt. Pleasant, NJ 08742

Wanted ftf. I have over 30 simulations AK, B, FT, MD, TB, many others. Raymond O'Connor, 117 Elliot Ave., Centereach, NY 11720, (516) 981-6411

Opponents for unrated pbm SL, COI, CL, BB'81, SST, WSIM. Does anyone have addresses of Patrick Higby (Ramsein Village) or Mark Propp (Washington, D.C.)? Michael Mahady, 4961 Dahlio Cir., Liverpool, NY 13088, 451-2097

AREA rated 1200 seeks AREA non AREA pbm TRC, BB, AK, DD, FTF 3R, GOA, SL, COI, AIW, AL, AZ, VITP, PB. John Lynch, 1400 Sunnyside Ave., Manaroneck, NY 10543, (914) 381-2272

Rochester area Diplomacy players organ. has been formed. We play DIP by phone. Places are always available. No player fee. For rules or info write: Bill Highfield, 2013 Ridge Rd. East., Rochester, NY 14622, (716) 266-7200

Staten Islandd war gamer seeks new members. 18yrs. and up. We meet 1st Tues. every month at Richmondtown restoration. For more info contact: Daniel Zucker, 13 Dongan St., S.I., NY 10310, (212) 448-1574

Where are all those Rockland wargamers? The King of Kriegspieling wishes opponents for PZ, PL, SL, BIS, VITP, WAS. Will learn new games. AREA rated. Robert Schoneman, 2 Revere Ct., Apt. 2105, Suffern, NY 10901, (814) 357-7603

The MHV Games Club meets regularly supporting all adult wargaming, FRP, etc. activities in the Mid-Hudson Valley. If interested call: Walt Kunz, 409 Chelsea Cay, Wappingers Falls, NY 12590, (914) 831-2269

Ftf opponents wanted in Charlotte area for all games. Keith Fortner, 1031 Norland Rd., Charlotte, NC 28205, 563-1386

Pbm AREA rated CH, I am looking for confederate opponents. Send your set up. AREA 1200 plus. I'm 1500. Also pbm FE, AREA. J. Ford Brammer, P.O. Box 321, Bellaire, OH 43906

Opponent wanted for: BL, BB, LW, SUB, VITP, 3R, MD, FR, WAS. Will also pbm for BL, BB. Ken Ungar, 4800 Woodbury Hills, Pasma, OH 44134, 842-4620

Local club meets third Sat., every month in Canfield, Tournament play. April-TRC, June-WSIM, August-FITW. More to folow. Contat the 'Warchild Society' c/o Gary W. Jones, 1157 Top N.W. Apt. A-2, Waren, OH 44485, (216) 392-4940

Wanted: pbm SL, COI, COD. Use honor system I have good pbm system. Tell what scenarios and sides you would prefer. Good adult players only. Greg Cassity, 2717 Gullick, Muskogee, OK 74401, (918) 683-4349

The Wargames Council of Portland, Oregon is looking for new members. We meet twice monthly and play all types of wargames. Call anytime! Mark Wardell, 2104 SE 28th Place, Portland, OR 97214, 236-0826

Experienced adult player seeking ftf play for SL, COI, COD, FT, AOC, FITW, CAE, NP, TRC, GL. Henry W. Jones, 117 Lochshin Dr., Coraopolis, PA 15108, (412) 457-8218

Veteran gamer seeks Montgomery county ftf in COD, FL, MR, others. Frank Tontala, 434 W. Vine St., Apt C-202, Hatfield, PA 19440, (215) 855-5331

AREA rated opponents 900 or below wanted for AIW, DD, GE77, PB, PL, STAL, TACII, TB, SST, TRC (SL System) Pbm only all games rated. "Tiger" Shep, 918 First St., Lancaster, PA 17603

AREA 900+ seeks 800+ pbm opponents for Germans in AK, BB, TRC, STAL for Allies in AZ for French in WAT. Undefeated in 4 games. Bill Beahan, 2814 Frost Dr., Library, PA 15129, (412) 831-9560

Need ftf opponents for SL, TRC, PL, W&P, GOA, or CAE. Also pbm TRC. Will play AREA 1400+ or for fun. 18 yrs. old. Steve Tornetta, 1800 DeKalb St., Norristown, PA 19401, (215) 279-4095

21 yr. old seeks ftf opponents for SL, COI, or COD in Phila. vicinity. AREA rated or not. Also have many other AH games. John S. Galvin, 1033 Ritner ST., Phila., PA 19148, (215) 389-7260

ARE CEI 09 (12/4/81) seeks rated pbm AK, BL, (tournament game only), LW, PB (situations 1-25), TRC. All replies answered. Robert Wrzesinski, 2506 Mission St., Pittsburgh, PA 15203, (412) 431-5522

GJN 1400+ seeks rated pbm TRC using my variant. You choose sides. All takers 900+ guaranteed a match. James Lawson, 1515 Gist St., B#1 (48-5), Columbia, SC 29202

Help, looking for pbm in AF, DL, 3R, TRC, SL, COI, COD, PB, PL, FT. Am rated 900+. Will play rated or non-rated players. Mike Archuletta, 115 E. St. Charles, Rapid City, SD 57701, (605) 341-1132

Adult AREA 900 seeks rated pbm FE, and AOC (using AOC pbm method Vol. 16 no. 4 please) Will take first caller for each game. Van Stewart, Rt. 5 Box 422G, Manchester, TN 37355, (615) 728-7493

Adult opponents wanted for ftf in Golden Triangle area. Will play most AH games. Michael Walton, 4040 Crow Rd. #304, Beaumont, TX 77706

Field of Fire Magazine offers pbm DIP, Origins, for sample issue send SASE to: Phil C. Fry, 5183 S. Gravenstein, Salt Lake City, UT 84107, (801) 261-3999

Adult player (26) looking for ftf opponents in the Renton, WA area. Steve Graves, 221 Park Ave., N #3, Renton, WA 98055, 255-1004

OPPONENTS WANTED

Adult pbm opponents wanted for intermediate GE'77, CH, FITW. Jeff Alsdorf, 7510 18th Ave. N.W., Seattle, WA 98117, (206) 784-2148

Looking for the best in wargaming? The NWA may be what you are looking for. Also looking for GM moderated DIP game. All inquiries answered. Michael Spink, 53 Pin Oak Hills, Wheeling, WV 26003, (304) 242-8083

Pbm or ftf; PB, PL, RW, SST, GL, JU or LW. Will play to the bitter end. David Burgermgister, 4242 N. 88th St., Milwaukee, WI 53222, (414) 464-6111

30 yr. avg. player seeking ftf opponent for fun not blood. AOC, SL, COI, COD, VITP, GOA, DIP, 3R. Also will try pbm. Will Moro, 127 Pinecliff Way, N.E., Calgary, Alberta, Canada T1Y3X2, (403) 280-0546

Pem or ftf SL, COI, COD, JU, SUB, TB, will learn others. Garry Cameron, 3528 11th Ave., Port Alberni, BC V94-4Y7, (604) 724-3920

Pbm AREA 600 need opponents for TRC, GE & TR. Needs system for TR. Would like to learn others including W&P, PL, 3R & STAL. Gord Reid, 294 Rhodes Ave., Toronto, Ontario Canada M4L3A3, (416) 469-4850

Experienced player seeks opponents for 3R, SL, COI, COD, FT, and AF. Will learn other games. Peter Serrador, 109 The Country Way, Kitchener, Ontario Canada N2E2K3, (519) 576-3752

Adult player wants in on a pbm 3R game, 20 yrs. experience at wargaming. Rated 1600+ and experienced in pbm also pbm KRIEG. B.M. McCuaig, T.H. 204 26 Underhill Dr., Don Mills, ONT. Canada M3A-2J3

16 yr. old wants opponents for 3R, SL, COI, COD. Also have AF, FT, STAL, BL and AIW. I am willing to learn most new games. Peter Serrador, 109 The Country Way, Kitchener, Ontario, Canada, N2E-2K3, 576-3752

AREA 900 (prov.) seeks pbm/ftf SL, COI, COD, BIS, PB, TRC. Adults only please, rated or not. I. Sadowski, 15-2513 7th St., E., Saskatoon, Sask. Canada

COD expert, age 34, seeks expert opponent. Pbm any COD or 200 scenario. O. G. Walters, Mossquoy, Deerness, Orkney, Great Britain, KW172QQ. 0856-74-331

COLLECTORS CORNER

Wanted: General 12/1, will pay too much, but prefer trade. Have some later out-of-stock issues for trade. Jim Davis, 21 Oak Hill #2, Northport, AL 35476, (205) 339-9537

Want to know where article about your favorite games appear in "The General"? Send for up to date printed list. 3 titles $1.00 plus SASE. MCC, P.O. Box 265, Marshall, AR 72650

For sale or trade: AZ'69 plus 19 other games. Willing to barter. Lee Lasky, Highland Pines, Prescott, AZ 86301, (602) 445-3944

Sale: 16 games: Kriegspiel, 1914, Old BB, Old BIS, PB & BL. Pbm kits, Generals Vol. 12,2-18,1 for $.50 or $1.50 ea. Send SASE for details. Lt. Hubert G. Schneider, III, Ballistic Missile Office/ENBE, Norton AFB, CA 92409, (714) 382-7018

For sale: AH games. All are sorted and in excellent condition; no counters missing, reasonably priced. Please send SASE for list. All inquiries answered. Bill Shoemaker, 22039 Lassen View Dr., Palo Cedro, CA 96073, (916) 547-3751

For sale/trade 1914 plus 50 other games and 60+ magazines. I want Generals Vol. 9 and below, and other magazines. Want face to face opponents here. Frank Hall, 650A Spring St., Santa Cruz, CA 95060, (408) 423-1145

For sale: Back issues of magazines and out of print wargames, for list send a SASE. Paul H. Vezzetti, 17 Dannell Drive, Stamford, CT 06905

Multi-player monitored pbm monster WWII game to be started. Need to know which games your interests are in. For sale: games and magazines, send SASE. John Brownawell, 18 Hackberry Dr., Felton, DE 19943, (302) 284-3835

For sale/trade: Out of print wargames and magazines including 1914, Jutland (first edition), many more. Some in mint condition. Send stamp for list. Wally Williams, Jr., 611 S.E. 1st Ave., Gainesville, FL 32601, (904) 373-3175

For sale or trade: over thirty games, most in excellent to unused condition. Many collectors items. Send SASE for detailed list. Will answer all responses. Bill King, 48 Dartmouth St., S.W., Cedar Rapids, IA 52404, (319) 366-2036

Going out of gaming sale. After 15 years, many games old and new AH. Mostly military, some fantasy. Good prices. Send SASE. L. Kanterman, 1405 Givens Rd., Manhattan, KS 66502, (913) 539-3786

Help! Captured by miniatures! Selling boardgame collection and old Generals to support my habit. Write for list. D.L. Moore, 511 S. Terrace, Wichita, KS 67218, (316) 684-4008

For sale: unpunched GUAD; board halves untaped, box slightly shabby—best offer over $25.00. I pay postage anywhere in continental U.S. Tim Young, 2216 Hilton Ave., Ashland, KY 41101, (606) 324-7820

For sale: '58 Getty, Guad, '62 Bis, The General from Vol. 7, and others. Send SASE for list. William Lindow, P.O. Box 253, Foxboro, MA 02035, (617) 384-2673

For sale: U-Boat, GUAD, $40 each or best offer. Excellent condition. Other games. Send SASE. Walter Beckman, 5752 Bluff Rd., St. Louis, MO 63129, (314) 846-2729

For Sale: Air Empire and GE ('61-square). Each in complete, mint, unopened, unpunched condition. Best offer over $50 each. David A. DeVarti, 921 Dewey, Ann Arbor, MI 48104

For sale many games (eg. 1914, GUAD, BB, FT, others). For list send SASE. Out-of-print games included. Terry Dotson, 1531 Waukesha, Helena, MT 59601

For sale/trade: Out-of-print—wargames, magazines and books including 1914, GUAD, Generals, plus many others. Send SASE for list. Ronald Sternowski, 139 Chaucer Pl., Cherry Hill, NJ 08003, (609) 428-9534

For sale: Collectors items, games, out-of-print Generals. Long list of items available. Send SASE for list. M. Stephens, 2 Desmond Rn., Sicklerville, NJ 08081

For sale or trade: many old AH and 3M games (C&O/B&O, Civil War, GUAD, PLOY, Blue Line Hockey, more!) Send SASE for list. H.M. Levy, P.O. Box 197, E. Meadow, NY 11554

Send for list of collector's items for sale, best offers. Bill Sarubbi, 111 Waverly Pl., NYC, NY 10011

For sale: over 70 wargames, most WWII, AH and others. Prices cheap, for list send SASE to: Burnie Hegdahl, 737 NE 3rd, Madison, SD 57042, (605) 256-3909

Desperately wanted: a copy of Squander by AH in fair to good condition at a price within reason with all components. Neale R. Gilson, General Delivery, Putney, VT 05346, (802) 254-2961

For sale: Many AH games. Some new, some old. Send SASE for details. All letters answered. Todd Davis, 2211 Highline Dr., Clarkston, WA 99403, (509) 758-7607

For sale AH games including 1914, GUAD and many other titles. Send for list with SASE. Would consider trades. Mick Bedard, 2204 Maple, Cross Plains, WI 53528, (608) 798-4977

GENERAL BACK ISSUES

Only the following *GENERAL* back issues are still available. Price is $2.50 per issue plus 10% postage and handling charges (20% to Canada, 30% overseas). Maryland residents please add 5% state sales tax. *GENERAL* postage coupons may *not* be used for this or other non-game orders. Due to the low quantities of some back issues we request that you specify alternate selections should your first choice be unavailable. Below is a listing of each issue by subject matter; game abbreviations are italicized and found in the Opponents Wanted ad insert in this issue and article types are identified as follows: H—Historical Background, DN—Designer's Notes, V—Variant, SR—Series Replay (sample game), S—Strategy, Q—Questions, P—PBM (postal) systems, Sc—Scenarios, A—Analysis. The largest (feature) articles are always the first one listed in each issue. Those issue numbers printed in red indicate one-color reprints of previously out-of-print issues.

12-2: *TB*—H, DN; *BB*—V; *BL*—V; *PB*—SR; *PL*—DN; *STAL*—S; *AZ*—Q
14-2: *KM*—S, H, P, DN, V; *AL*—SR; *SL*—DN
14-3: *AIW*—H, DN, S, Q; *TRC*—S; *3R*—S; *STAL*—SR; *WAS*—V; *PB*—Sc
14-4: *VITP*—DN, V, Q; *3R*—S; *RW*—V; *STAL*—SR; *JU*—P; *1776*—S
14-5: *SL*—H, A, DN, Q; *WS&IM*—A; *TRC*—S; *MD*—S; *SST*—S; *3R*—S
14-6: *DD*—DN, V; *VITP*—SR; *PL*—V; *CL*—Sc, *TB*—Sc
15-2: *PL*—V, Sc; *STAL*—V; *3R*—V; *DD*—DN; *RB*—S; *VITP*—S
15-3: *AOC*—S, A, DN, Sc; *TRC*—V; *3R*—V; *SL*—V; *WAS*—V
15-5: *MD*—V; *WS&IM*—Sc; *AK*—S; *OR*—V; *3R*—V; *DD*—S; *WAS*—V; *SST*—Sc; *SL*—V; *CAE*—S; *FL*—V; *SUB*—Q
15-6: *COI*—A, DN, S, Sc, Q; *WAS*—V; *AIW*—S; *SST*—Sc; *PL*—V
16-1: *AZ*—Sc, S, DN; *3R*—S; *NP*—S; *PB*—SR; *1776*—S; *DIP*—S
16-2: *BIS*—A, Sc, H, DN, Q; *PB*—SR; *AK*—S; *1776*—S; *WS&IM*—S
16-3: *PL*—A; *WAS*—S, H; *TB*—Sc; *COI*—SR; *1776*—S; *MD*—V
16-4: *MR*—A, V, DN, Q; *COI*—S; *3R*—S; *TRC*—SR
16-5: *TRC*—S; *SUB*—Sc; *SST*—S; *WAS*—S; *PB*—V; *RB*—V; *NAP*—S; *COD*—Q
16-6: *DUNE*—A; *DIP*—V; *OS*—V; *AZ*—DN, Sc, SR; *PB*—A, PBM
17-1: *W&P*—A, DN, V, Q; *3R*—S; *COI*—S; *MD*—V; *COD*—A; *MR*—V; *LW*—S; *WAS*—SR
17-2: *COD*—A, Sc, Q; *WAT*—Sc; *VITP*—SR
17-3: *AK*—S; *3R*—S; *COD*—S, Q; *AF*—A, DN; *TRC*—V; *VITP*—V; *COI*—SR
17-4: *FE*—S, P, DN, V; *MD*—V, Q; *COI*—SR; *VITP*—S; *1776*—Sc; *WQ*—A; *SST*—V; *NAP*—S
17-5: *CM*—S, V, Q; *RW*—V; *SL*—V; *STAL*—V; *PL*—S; *3R*—S; *CAE*—V; *KM*—S; *3R*—SR; *MR*—S
17-6: *STAL*—S; *WS&IM*—V, Sc; *WAS*—V; *3R*—SR; *SL*—S; *TLD*—Q; *CL*—S; *VITP*—S; *TRC*—S
18-1: *FITW*—A, Q; *BIS*—S; *SL*—S; *DUNE*—V; *DIP*—S; *AK*—A; *PB*—SR; *AL*—S; *W&P*—S
18-2: *AF*—A, Sc, Q; *AK*—V; *3R*—DN; *TB*—V; *SL*—S, Sc; *AIW*—V; *VITP*—S; *DIP*—S; *DD*—S
18-3: *GOA*—S, DN, V, Q; *AOC*—V, Sc; *AK*—S; *VITP*—V; *SL*—S, Sc; *WS&IM*—SR, P; *DIP*—S
18-4: *GL*—H,V,A,Q; *SL*—Sc,A; *LW*—V; *W&P*—SR; *AOC*—S,P; *FE*—V; *WAS*—S; *AK*—S
18-5: *3R*—S, A, V, DN, Q; *SL*—S, A, Sc; *TRC*—V; *TB*—V; *RW*—V; *CL*—A; *DUNE*—V

READER BUYER'S GUIDE

BATTLE OF THE BULGE $16
Redesign of the Classic Game of the German Ardennes Offensive

INSTRUCTIONS: Rate all categories by placing a number ranging from 1 through 9 in the appropriate spaces to the right (1 equating excellent; 5-average; and 9-terrible). EXCEPTION: Rate item No. 10 in terms of minutes necessary to play game as recorded in 10-minute increments. EXAMPLE: If you've found that it takes two and a half hours to play FRANCE 1940, you would give it a GAME LENGTH rating of "15." For games with more than one version give two game length ratings; one for the shortest scenario and another following a slash mark "/" for the longest scenario or Campaign Game.

Participate in these reviews only if you are familiar with the game in question.

1. Physical Quality ___
2. Mapboard ___
3. Components ___
4. Ease of Understanding ___
5. Completeness of Rules ___
6. Play Balance ___
7. Realism ___
8. Excitement Level ___
9. Overall Value ___
10. Game Length ___/___

The review sheet may be cut out, photocopied, or merely drawn on a separate sheet of paper. Mail it to our 4517 Harford Road address with your contest entry or opponents wanted ad. Mark such correspondence to the attention of the R & D Department.

$1.00

Good for Postage Charges Only on Complete Game Purchases

This coupon is valid only for mail order purchases of complete games direct from Avalon Hill. Each postage coupon entitles the sender to deduct up to $1.00 from the postage charges of any order for a complete game provided the amount deducted does not exceed the total postage charge for that order. Coupons are not usable for parts, magazines, or pbm kit orders.

Shipping charges are 10% of the dollar amount of your order if sent to a USA address. Shipping costs to Canada and Mexico are 20% of the order; overseas orders must add 30%. Any past GENERAL postage coupons previously offering different values may be used as the equal of this coupon.

Example: Customer A lives in the USA and orders a $15 game. His postage charge is $1.50 which he may pay by sending in 2 postage coupons and $15, or 1 postage coupon and $15.50. Customer B lives in Canada and orders the same game. He must pay $15 in USA funds plus 3 postage coupons or $15 plus $1 for each postage coupon less than 3 which he sends.

$1.00

WHAT HAVE YOU BEEN PLAYING?

Top ten lists are seemingly always in vogue these days. Whether the subject is books on the Best Seller List, television's Nielsen ratings, or even games, the public never seems to tire of seeing how their individual favorites stack up numerically against the competition. Our preoccupation with this national pastime is almost akin to routing the home team on to victory every Sunday. So to further cater to your whims (and to satisfy our own curiosity) we unveil *THE GENERAL's* version of the gamer's TOP TEN.

We won't ask you to objectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or less) games which you've spent the most time with *since* you received your last issue of *THE GENERAL*. With this we can generate a consensus list of what's being *played* . . . not just what is being bought. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.

Feel free to list any game regardless of manufacturer. There will be a built-in Avalon Hill bias to the survey because you all play Avalon Hill games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual's discretion.

The games I've spent the most time playing during the past two months are:

1. _____
2. _____
3. _____

Opponent Wanted 50¢

1. Want-ads will be accepted only when printed on this form or a facsimile and must be accompanied by a 50¢ token fee. No refunds. Payment may be made in uncancelled U.S. postage stamps.
2. For Sale, Trade, or Wanted To Buy ads will be accepted only when dealing with collector's items (out of print AH games) and are accompanied by a $1.00 token fee. No refunds.
3. Insert copy on lines provided (25 words maximum) and print name, address, and phone number on the appropriate lines.
4. Please PRINT. If your ad is illegible, it will not be printed.
5. So that as many ads as possible can be printed within our limited space, we request that you use official state and game abbreviations. Don't list your entire collection, list only those you are most interested in locating opponents for.

Afrika Korps—AK, Air Force—AF, Alexander—AL, Amoeba Wars—AW, Anzio—AZ, Arab-Israeli Wars—AIW, Assault On Crete/Invasion Of Malta—AOC, Bismarck—BIS, Black Spy—BS, Blitzkrieg—BL, Battle Of The Bulge—BB, Caesar Alesia—CAE, Caesar's Legions—CL, Chancellorsville—CH, Circus Maximus—CM, Cross Of Iron—COI, Crescendo Of Doom—COD, Dauntless—DL, D-Day—DD, Diplomacy—DIP, Down With The King—DWTK, Feudal—FL, Flat Top—FT, Fortress Europa—FE, France 40—FR, Fury In The West—FITW, Gettysburg—GE, Gladiator—GL, Guns Of August—GOA, Jutland—JU, Kingmaker—KM, The Longest Day—TLD, Luftwaffe—LW, Machiavelli—MA, Magic Realm—MR, Midway—MD, Napoleon—NP, Origins—OR, Outdoor Survival—OS, Panzerblitz—PB, Panzer Leader—PL, Rail Baron—RB, Richthofen's War—RW, The Russian Campaign—TRC, Samurai—SA, Squad Leader—SL, Stalingrad—STAL, Starship Troopers—SST, Storm Over Arnhem—SOA, Source Of The Nile—SON, Submarine—SUB, Tactics II—TAC, Third Reich—3R, Tobruk—TB, Trireme—TR, Victory In The Pacific—VITP, War and Peace—W&P, War At Sea—WAS, Waterloo-WAT, Wizard's Quest—WQ, Wooden Ships & Iron Men—WSIM.

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

NAME_____ PHONE_____

ADDRESS_____

CITY_____ STATE____ ZIP_____

CONTEST NO. 106

____GERMAN WIN ____DRAW ____RUSSIAN WIN

	GERMAN PLAYER TURN	RUSSIAN PLAYER TURN
RALLY PHASE		
PREP FIRE PHASE		
MOVEMENT PHASE		
DEFENSIVE FIRE PHASE		
ADVANCING FIRE PHASE		
ROUT PHASE		
ADVANCE PHASE		
CLOSE COMBAT PHASE		

Issue as a whole . . . (Rate from 1 to 10, with 1 equating excellent, 10 equating terrible)
Best 3 Articles

1. _____
2. _____
3. _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

EASTERN FLEET ORDER OF APPEARANCE

INITIAL SET UP (TURN 1)
BAY OF BENGAL (cannot move)
Hermes
Revenge
INDONESIA (cannot move)
Prince of Wales
Repulse
SINGAPORE (can move)
Exeter

TURN 2
Arrivals:
Royal Sovereign
Ramilles
Resolution
Warspite
Indomitable
Formidable
Cornwall
Dorsetshire

TURN 3
Arrivals
Valiant
Illustrious
Devonshire[1]

TURN 4

Arrival	*Removals*
Shropshire	Formidable
	Indomitable (put on turn 8[2])

TURN 5

Arrival	*Removals*
Victorious (Pearl Harbor)	Illustrious[3] (put on turn 7[2])
	Resolution[4] (put on turn 7[2])
	Revenge[4] (put on turn 7[2])
	Valiant[4] (put on turn 7[2])
	Warspite[4]

TURN 6

Arrivals	*Removals*
Sussex[5]	Devonshire[5]
Suffolk[5]	Victorious (put on turn 8[2])

TURN 7[6]

Arrivals	*Removals*
Queen Elizabeth[5]	see note 6
Richelieu[5]	
Unicorn[5]	
(Illustrious)[7]	
(Valiant)	
(Resolution)	
(Revenge)	

TURN 8[8]

Arrivals	*Removal*
London[5]	Illustrious[9](put on turn 9[2])
Cumberland[5]	
(Victorious)[7]	
(Indomitable)[7]	

TURN 9[10]
Arrivals
Indefatigable[5]
King George V[5]
Howe[5]
(Illustrious)

STARTING CONTROL

Indian Ocean
Bay of Bengal

Singapore
Ceylon
Madagascar

Andaman Islands
Addu Atoll

Notes:
1. I have conflicting references about the *Devonshire,* so I am willing to go along with Mr. Davis: it enters on turn 3.
2. The ship removed here will reappear on the turn indicated.
3. The *Illustrious* should leave this turn. I delayed its departure in the game as a "fudge factor" so its loss would not interfere with the arrival of the Victorious and because I wanted to strengthen the British defensively to make up for the lost ships.
4. The battleships leave this turn, not turn 7 as Mr. Davis suggests. In February they started escorting slow troop convoys back to England, which took them out of the war zone even though they were not technically reassigned until the convoys arrived months later.
5. Historical entry or exit. *Unicorn,* a CVE, should be excluded but why be a spoilsport?
6. Decommission "R" class battleships (rule **4**). No replacement ships need be removed.
7. All British airstrikes are increased to 3 (*Hermes* and *Unicorn* excluded). See rule **2.2.**
8. British patrollers fail their speed rolls if they move to INDONESIA. See rule **6.2.**
9. The British need not remove another ship if the *Illustrious* has been lost. See rule **3.3.**
10. All British airstrikes now have the attack bonus. See rule **2.3.**